



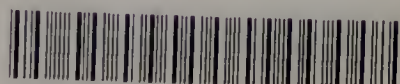
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CASSELL'S
BOOK OF THE HOUSEHOLD

Δ

Work of Reference

ON

DOMESTIC ECONOMY

VOLUME II

SPECIAL EDITION

WITH COLOURED PLATES

CASSELL AND COMPANY, LIMITED
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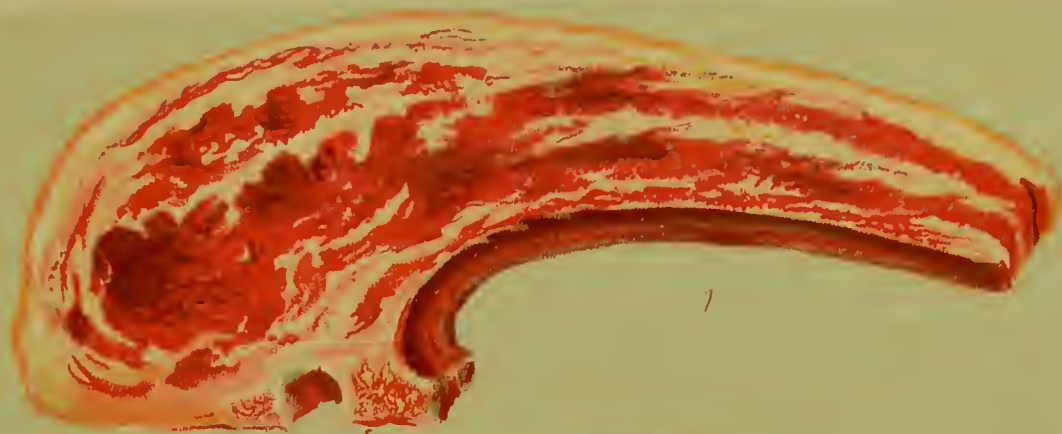
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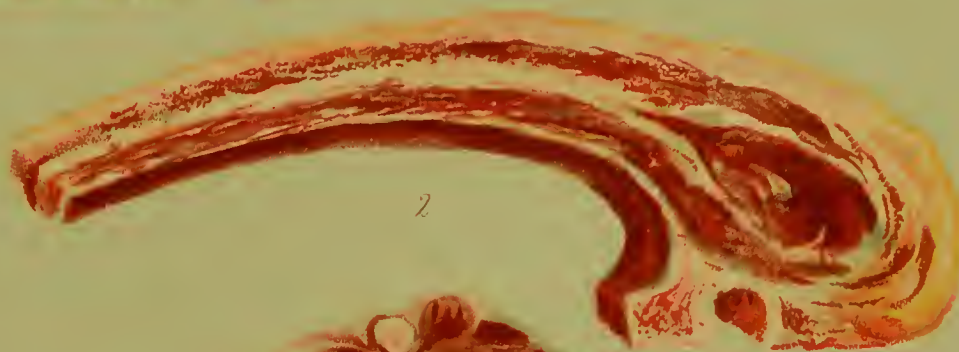
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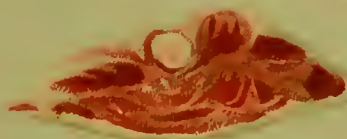




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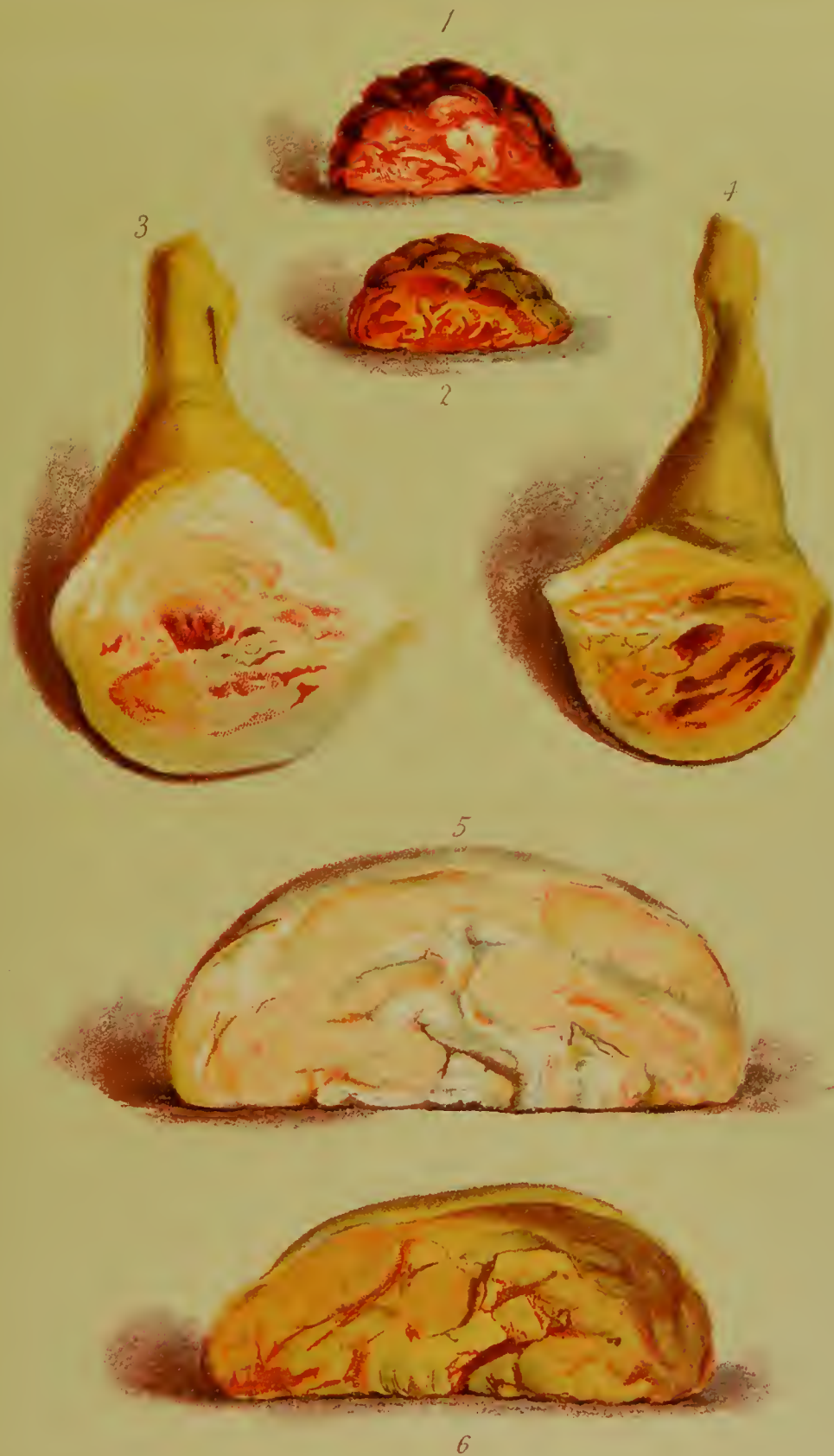


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GOOD & BAD MEAT.

1. <i>Ribs of Beef, Prime Quality.</i>	3. <i>Leg of Mutton, Prime Quality.</i>	5. <i>Chump Chop, Prime Quality.</i>
2. <i>" Inferior "</i>	4. <i>" Inferior "</i>	6. <i>" Inferior "</i>





GOOD & BAD MEAT

1. Kidney, Prime Quality
2. " Inferior "

3. Leg of Pork, Prime Quality
4. " Inferior "

5. Veal, Prime Quality
6. " Inferior "



CABSELL & COMPANY LIMITED, LITH. LONDON

DESIGN FOR DINNER TABLE ARRANGEMENT

CASSELL'S BOOK OF THE HOUSEHOLD.

DRAWING-ROOM FURNITURE.

THE furniture of the modern drawing-room is of the kaleidoscope order. The individual pieces are of all sorts and sizes, and are always capable of fresh combinations. It is, however, desirable that every article of furniture should be useful and comfortable, as well as pretty, because the drawing-room is eminently an apartment to be lived in peacefully, after the rush and hurry of the day is over. Something of all sorts is permissible—any bits of Chipendale and Sheraton obtainable, inlaid or Japanese cabinets, Oriental trifles, and, in fact, “samples” of everything under the sun, old and new, in the way of furniture. Marqueterie is charming and expensive, but is sometimes to be found in brokers’ shops in quarters of London unknown to fashion; and in country villages and towns remote from railways it is also to be picked up, not always indeed for a mere song, but at comparatively moderate prices. A few months ago, at a sale in an out-of-the-way middle-class house on the borders of Hertfordshire, a “parlour” full of marqueterie was sold. No one knew its exact value; the house-keeper had small respect for her late master’s fad for “they old things,” and a broker from a distance bought them at a low price, and offered them for sale extremely cheap, though at a large profit. They were of different dates and values, but had been lovingly collected and carefully kept, and many a London drawing-room would have been proud of them; but in that broker’s shop, frequented principally by country farmers and tradesmen, they will probably remain overlooked for a long while to come.

We have dilated elsewhere on the paper and carpet suitable for a drawing-room, and shall not here attempt to give any rigid detailed schemes for the colouring of papers and carpets and paint, but refer to what has been said on the subject of harmony and contrast of colours at p. 61 (Vol. I.). The aspect has to be considered, and even the hours at which the principal use of the room begins, according to the

engagements of the family, since the effects in daylight and in gas-light have both to be considered. There is far too great a tendency amongst some writers who profess to lay down the law in these matters, to confine attention too much to certain colours or narrow schemes of colour. At the present moment there is a sort of fashion for bright carpets and extremely light papers, and these are sometimes adopted where most unbecoming. The true artistic sense is one that tends to large *liberty* in these things; and real artists, let it be noted, are very seldom found following slavishly these modes of an hour. Some of the colours and combinations lately in fashion, or pronounced to be so, are distinctly too glaring for really good taste; though the modern tendency to more brightness in the drawing-room, and to pale sparrow-egg blues and greens generally, is a distinctly good one. There are some truly artistic drawing-rooms to be found, where the quietest of colours and harmonies have a most charming effect of repose, that could be obtained in no other way. A certain school of writers, it must be remembered, call everything Philistine which does not conform to certain rules of their own; but true artists smile at all this, and apply the term to people who have things so-and-so merely *because other people have them so*, and which may be just as ridiculous in the case of a blue carpet, as formerly in a “suite” of spider-legged furniture.

So also with the chimney-piece. We will hope it is a wooden one, painted to suit the room; and even if one does not belong to the house, we will suggest that it may be movable, for there are many so made that simply cover up the tasteless erections so common in the ordinary suburban villa. Still, there are eases where the drawing-room has a plain good white marble chimney-piece, a slow-combustion stove, a tiled hearth, and a marble fender; and these are not to be despised, and can scarcely be replaced by anything that really looks better, though these

will be regarded as common and utilitarian notions, as all are called that are bold enough to differ from the *dicta* of fashion in furniture. If a fender has to be provided, we will recommend that it be either black with brass knobs, or brass entirely, and that the fire-irons and rests for them be also of bright brass.

As for the overmantel, it must depend on what we have by us, unless it be included in the woodwork of the chimney-piece, which is more than likely. It is quite usual, and quite proper, for the overmantel of a drawing-room to show more mirror-surface, and to be of a lighter-looking character, than would be suitable for a dining-room. Light colours, according to the painting of the room, picked out with narrow gold lines, are not uncommon. Black-and-gold, to look well, requires rather careful treatment of the furniture and upholstery. A great deal of the effect of an overmantel depends upon the taste and skill with which the *bric-à-brac* is selected to furnish it.

The Piano.—One of the principal items in the furniture of most drawing-rooms is the piano, and one of the most curious phases of real and genuine "Philistinism" is the tendency of a certain set of people to sacrifice the piano as a musical instrument, for the sake of improving what they are pleased to call the decorative effect of the room. Thus, in some rooms we may find a grand piano "draped," and the drapery kept from slipping off by heavy pots and pans placed on the top, which ruins the tone; or the top covered over with all kinds of odds and ends, as if the object were to prevent the instrument from being seen. The first consideration about anything is its legitimate use. Now the primary object of a piano is to give music; and apart altogether from the question of loudness, which can always be subdued, a good piano—whether cottage or grand—is as different as possible in *quality* of tone when properly opened at the top, from what it is when merely shut, to say nothing of being covered over by heavy and jangling articles of all sorts and conditions. If the piano is not more ambitious than the room can bear, it can always afford to stand for what it is, and tell its own tale.

The grand piano will always be the favourite for large rooms, with really good performers. It is, however, awkward to adapt to any but a large room as a piece of furniture; and it is well to remember that the introduction of iron frames and double oblique over-stringing into piano construction, has given to the cottage model a power and volume of tone formerly unobtainable. The purchaser must not be led away by the mere name of "upright grand," which often covers nothing grand at all; but really

good over-strung pianos possess a magnificent tone—often, indeed, almost too powerful for small drawing-rooms. As already observed, the quality as well as volume of tone is much improved in such instruments by opening the top, and they should, therefore, never have any loose articles placed upon them. The tone of a piano depends somewhat also upon the floor underneath being firm and level. It should not be placed upon glass "insulators," unless that is really necessary to make the height of the key-board more suitable to those using the instrument.

People with ample means will of course repair to some one of the great houses for an instrument. The development of the "three years' system" has made it generally understood that the "list" price of pianos is for instruments purchased on that system; and most houses allow a large discount—25 per cent., more or less—for cash. Instruments by the cheap advertising houses can seldom be depended upon, lasting quality in a piano depending so much upon the finest and most sonorous wood, seasoned for many years in the workshop, being used for the sounding-board; and common makers do not possess such material, or even the technical skill to select it. Where economy is an object, a good second-hand pianoforte by a standard maker can often be selected at a very moderate price by some professional who is really a friend; and, of course, any fair musician is a competent judge of the tone of such an instrument, while the name should be a fair guarantee for the rest; but most second-hand pianos advertised in the papers are swindles.

There are one or two French and German makers who supply thoroughly good pianofortes at considerably lower prices than are charged for similar instruments by English makers of any repute. This by no means applies to all the foreign houses, there being as many worthless German makers as English; but some Continental manufacturers combine thoroughly good quality with extreme moderation in price, and it is quite possible to obtain an excellent and really brilliant-toned over-strung piano at a cash price under forty guineas.

The case of a piano must of course be chosen, when a new instrument is purchased, with some reference to the other furniture of the room; but a word may be said concerning the ebonised black-and-gold now so fashionable. It is exceedingly pretty, and very noble in appearance when the other surroundings correspond; but the large surfaces of a piano show the slightest scratch rather conspicuously, and black cases therefore demand extreme care. On the other hand, such a veneer as walnut shows very little of such signs from family

wear. There are many cases where such a consideration will cast the vote with prudent people.

The now usual custom of placing a cabinet or cottage piano in a corner, with its back to the room, calls for special ornamentation of that otherwise ugly feature. Most ladies make or buy something artistic in the shape of *appliqué* work or embroidery on plush; but this is fast becoming a distinct branch of the upholsterer's art, as the piano becomes more and more an ornamental object. Literally, anything really decorative and in good taste can be applied—from a plain square of Japanese paper, to the most costly original painting; and it cannot be too widely known that some ladies make a living by painting decorative designs for piano-backs, panels, screens, friezes, and other suitable parts of a room or articles of furniture. Such an artist may usually be trusted to supply a truly harmonious design, which need not necessarily be expensive.

Modern cottage pianos are made with fronts which need no treatment, provided the sconces be selected with judgment. Antique patterns in bright *bronze* usually look best for these. It is worth noting that French models in cottages are not as a rule so high from the floor as German or English for the same class of instrument, and this point may occasionally determine the selection either way. It is also to be remarked that the fashion of setting a cottage piano across a corner demands, like a grand piano, a certain size of room to give a good effect; we have seen the plan adopted in many rooms where the result was unmistakably bad in every way, and where nothing was wanting to make a charming room but to set back the piano in its old-fashioned position against the wall. It will depend upon the room, which position gives the best *tone*; and real musicians will of course study this matter also.

The old screw music-stool is almost a thing of the past. A couple of black-framed rush-seated stools, or a rush- or cane-seated or cushioned bench, are very nice; or an oblong box on castors, prettily covered, which serves the double purpose of holding music and forming a piano-seat; or a couple of fancy cane or rush chairs, each with a loose cushion attached to the frame by a cord or ribbon, and easily turned off or replaced—all these are very sensible and suitable seats for the piano.

Window-Seats.—Where there are bow or Queen Anne windows, with any prospect outside, a great deal of supplementary comfort is added to a drawing-room—or, for that matter, to any other—by fitting it up with seats, which need only be deal benches. Following the shape of the window-recess, they are usually in three parts, and

should have flat cushions made to fit them; while the space below is screened by a curtain or valance, either like the curtains, or the coverings of some of the things in the room. Chintz, cretonne, or cotton is best, because it can be washed and made clean. A wide cushioned seat of this kind is almost as good as a sofa, and a delightful resting-place for a child, who will sit or lie there for hours with a doll or a picture-book—perhaps because the pleasure of looking out of window affords a change of occupation, or the possibility of it.

Often, however—especially if the window be large and square, and still more especially if there be a semi-invalid in the family—it is better to place in it a really comfortable couch, or a couple of easy-chairs. Too large a bay would be thrown away on mere window-seats. One may be found here and there which really gives ample room for two or three ladies at afternoon tea.

Occasional Chairs.—All sorts of little chairs, most of them very inexpensive, are to be had for the drawing-room, and come under the head of “occasional.” Most of them are low; and when expense has not to be considered, there are a great many nice shapes in upholstered chairs; but the majority have black frames, and seats of fancy rush or cane. One or two hammoek-seated chairs are also useful, ornamental, and cheap.

The somewhat old-fashioned yet ever-comfortable Derby chairs, which have such a sad habit of toppling over forwards unless one sits right back in them, come under the name of occasional chairs, and so do the small “saddle-bags,” and the folding-chairs with only a piece of carpet or tapestry for the seat, and the curious and oddly-shaped antiques in cane or carved wood and Utrecht velvet, that are sometimes to be met with. Some small wicker chairs are so prettily fashioned that it would be a shame to cushion or cover them; and in many neighbourhoods there are specimens of local industry that can be utilised. A very old-fashioned kind of chair, made of straw and called a “beehive,” is much liked by some; and we have known it trimmed up and supplied with a “slumber-roll” or round cushion for the head, so as to be quite suitable for a drawing-room. In fact, almost any kind of chair is admissible, and the most unlikely seem now capable of some kind of artistic treatment that produces a comfortable, cosy, and home-like appearance; which, rather than luxury or display, is the effect now sought in a drawing-room.

The Austrian bent-wood makes very inexpensive occasional chairs, either in black or brown. A bent-wood rocking-chair is much liked by many. Cream woodwork is now rather superseding the black, be-

cause it shows dust less, though of course it is easily soiled. Scarlet, too, is very fashionable, especially with fancy rush seats; and the frames of fancy chairs are frequently inlaid with mother-of-pearl. Both rush and cane have a bad habit of getting discoloured, and if subjected to much hard usage the cane gives way; and nothing is more disreputable than a cane-bottomed chair with a hole in it.

Caning is essentially a woman's industry, and these who do it quickly earn a good deal of money. They are apt to say that the peripatetic caners who go about the streets and inquire for chairs to mend are the women who could not, or would not, cane well enough for the chair-makers. Good caning may generally be known by having a strand of cane, and sometimes two, bound round the edge of the seat, and thus adding a finish, while the bad is without it. A caning-girl who goes to service usually feels a professional dislike to seeing chairs out of order, and will offer to re-seat or mend them; but, truth to tell, the clever receive so much in the

form of weekly wages, or by piece-work, that only exceptional circumstances induce them to become domestic servants.

Rather small wicker chairs are often cushioned for "occasionals" in different kinds of silk or tapestry, the distinguishing feature being a half-square of very handsome tapestry or brocade at the top of the back cushion, finished off with fringe or cord. Chairs on which needlework is made up, are expensive—at all events, in the first instance—but they add very much to the prettiness of a room, and can generally be covered again by amateurs, if desired.

Sofa or Couch.—A drawing-room without something of the couch kind would, indeed, be incomplete; and yet there are rooms where it is very difficult to find space for one. Take, for instance, the moderate-sized room, where there are two or more windows on one side, and the fireplace opposite, leaving two spaces which are just too small to take a comfortable sofa; while the door is at one end, and at the other a French window. Nice large wide sofas may be had for about eight guineas, covered according to taste; but they have

two ends, and there are people who fancy that they cannot stretch their limbs comfortably if there is any obstruction at the lower end. It is a great deal more than fancy in many cases, for modern sofas are often of tortuous make, with corners so rounded that they form a couple of arm-chairs, very nice for two people to sit and talk in, but not affording space for any but a very diminutive person to lie down. The couch, which has only one end, goes in a much smaller space, and costs less money, but it is devoid of the air of comfort that is given by a wide roomy sofa with plenty of cushions.

Ottomans and Settees.—Drawing-room ottomans are of various shapes; many of the old ones with bent or carved legs and cushioned tops being

merely square or oblong stuffed stools to seat one or two people. Box ottomans are the most useful things imaginable, and often very ornamental indeed; somewhat heavy unless they run on castors, but when once obtained, not lightly to be

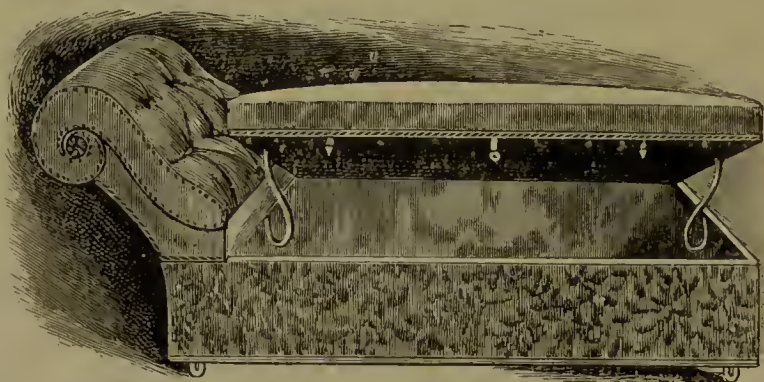


Fig. 1.—Box-Couch.

parted with. A genuine box ottoman, shaped as such articles of furniture usually are, with sides sloping downwards and inwards, resting on castors, lined within and upholstered without so as to form a softly cushioned seat, covered in such a manner as to harmonise with the room it is in, is a most welcome addition to drawing-room furniture. There is something informal about it, and it serves to hold the music that will overflow from the Canterbury; the work-baskets, that are perhaps only brought out in the evening; or a bulky piece of needlework, that is not easily carried away, and would look untidy if left on chair or sofa. For bedrooms such ottomans are also most valuable; and, indeed, there is scarcely any part of the house where they are not desirable. They are, however, rather expensive, though admirable ones can be made from plain, strong, wooden boxes hung round with a flounce of any material preferred, and the lid stuffed with hair or flock, with sheets of wadding laid carefully on and tacked down with crash or canvas, the covering material laid over and finished with a headed frill or bordering. A good well-upholstered ottoman, however, can be covered over and over again, and in the long run proves worth the money that was originally given for it.

Officers' wives, who seldom have a fixed home, but wander about from place to place, usually indulge in several box ottomans. They add very much to the meagre plenishings of the furnished houses to be found in garrison towns; and, moreover, hold the rugs, table-covers, and pretty trifles with which ladies thus situated endeavour to mitigate the hard features of their hired abodes, and surround themselves with familiar objects.

Couches are often made on the same plan (Fig. 1), and may be useful either in similar circumstances, or to hold piles of old music, of which some music-lovers possess more than they know where to bestow in the drawing-room. One characteristic of modern life and furnishing, and a very good one it is, is the multiplication of real *conveniences* in the living-rooms, of a sort that formerly were almost confined to the more luxurious of bedrooms.

An article of furniture often said to be out of date, and much scoffed at by young England, is the settee or *causeuse*; and yet it is peculiarly suitable to a long drawing-room, or to one which

has only doors or curtains separating it from a second smaller drawing-room. A *causeuse* placed just between the two has the effect of taking off what may be called the double character of the room, and showing that to all intents and purposes it is only one. A seat for two is so made that the occupants sit face to face; or one for three, as at Fig. 2, brings three people very cosily together. Another very good kind of settee consists of four pieces—two which may by courtesy be called couches, and two smaller ones, which may very well be called armchairs. They fasten together into a good central piece of furniture, and when apart are very useful in recesses; but the catches on the backs betray them if those backs are visible. Such a piece of furniture as the four combined costs about £12 12s., for unless good and well made they are useless. Modern notions substitute a slightly raised platform with a quantity of large soft cushions on it, or very often a heap of cushions is merely placed on the floor. Such an arrangement is not really convenient or suitable to any but children, and it is doubtful if such fashions will be very permanent in this country.

The entire comfort of a settee depends upon its being stuffed properly, with the seats sufficiently low.

A great many were made much too high, and were stuffed both too hard, and in such a way that the occupants felt a constant tendency to slip off. We have a private idea that to this cause, in some degree, may have been owing their somewhat diminished favour of late. The very notion of using a settee is to "sink back into luxury" for a pleasant chat. A piece of furniture that affords this will never lack supporters; but the settee is almost necessarily confined to rooms of a certain size.

Tables.—The old-fashioned table in the middle of the room has vanished long ago; and yet there are some of us who have a handsome rosewood or walnut table, or even one that is a thing of beauty

in itself through being inlaid. They are far too good to part with, and in the course of a few years may, perhaps, return to favour. A very good way of disposing of a table of this kind is to place it across a corner of the room, and, while taking care not to injure the surface, put a large plant, or a group of plants, on it (made

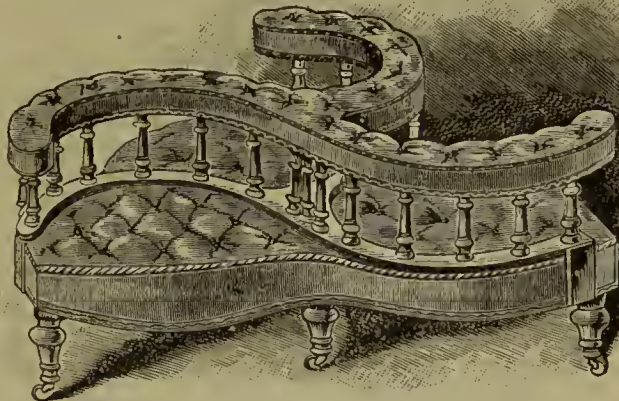


Fig. 2.—SETTEE.

of different heights in one large ornamental pot or basket), and some books. A picture that bears close looking into, and would be lost on the walls, may sometimes be placed on the back of a table in such a situation, leaning against the wall. Again, a round table can have the top taken off, carefully wrapped up, and put away; and the pedestal on which it stood can have a small cloth or coloured antimacassar put over it, and will then form a stand for a large china jar or a plant. The old-fashioned article called a sofa-table can always be advantageously used, either in front of a sofa, in the recess of a large window, or against the wall; or such a table is not to be despised if transferred to a bedroom and used as a roomy dressing-table. There are always drawers in it, and they are useful wherever it may stand; and in the drawing-room it is just as well if one of them contains a duster.

The "centre-table," as it was called, is never to be seen now, except in certain immense rooms to which these chapters cannot apply. They belonged to the day when a room was kept for show purposes only in middle-class households, and a certain number of show books or albums were arranged in a strict radial pattern around some kind of centre

ornament, and every chair was kept in its place. To spend the evening in such an apartment, from choice, never entered any one's head, and would indeed have been difficult, since the table occupied the greater

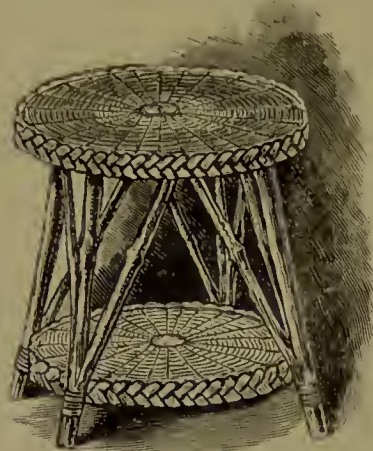


Fig. 3.—WICKER TABLE.

part of the most useful space. The modern idea is to sit about anywhere, just where fancy or the company inclines: and then smaller tables, which can be moved about to suit the whim of the moment, or can accommodate whatever casual purpose happens to be in hand, are a necessity, though we repeat our opinion that a more substantial table is both useful, and may be made quite ornamental, in a corner of the room.

Of the new-fashioned tables, ebonised, or enamelled in cream, or any other colour that harmonises, the great thing is that they should stand quite firmly and steadily on their legs, so as not to be easily knocked over by the unwary. Very nice square tables are to be had for about £3; and very good ebonised ones at about 24s.; or tables with two rounds, one above and one below, from 15s. Wicker tables, too (as in Fig. 3), are very handy, pretty, and cheap; and there is a kind of wicker tea-table, with little folding trays (Fig. 4), that is quite invaluable for afternoon tea. Sutherland tables, that fold up and go into corners if required, may be had from £2 each; and any one who has ever known such a convenience would, indeed, be sorry to be without it.

Cabinets.—A drawing-room generally contains something of the cabinet or chiffonnier kind, though the latter is out of date, and really wider than is desirable. Cabinets are of all sizes and prices, but a very nice one may be bought for about £4, which has glass side cupboards for delicate china or books; and a central one, which holds old magazines, illustrated papers, a stock of stationery, or the thousand-and-one things that are useful, and not always required in sight.

It must depend entirely upon the room whether a large and high cabinet will look well in it or not; in some rooms nothing adds so much to the total effect, while in others a large cabinet would look ridiculous. There is also the task of filling the cabinet properly to be considered. In many drawing-rooms two or more cabinets may be advantageously placed, which are better if of different pattern, though of course similar in style. Cabinets are occasionally made to stand out in the open part of the room; but such are only suitable for special situations.

Cabinets often give the opportunity of preserving things that are interesting in themselves and yet can hardly be classified, as, for instance, the curios so often brought home by wanderers—the fine pieces of coral, specimens of weapons, large and curiously coloured shells. Specimens of spar, of lead, iron, and copper ore, are scarcely chimney-piece ornaments, and are not desirable on tables, but all their beauty may be displayed in a cabinet. Then, again, there are collections that can be arranged in specially made cabinets, such as small shells according to the families of the creatures inhabiting them, insects, coins, relics, antiquities, &c.—all of which are veritable treasures, not only precious to the owner, but often most entertaining to his guests, and they are suitable to library or drawing-room, perhaps especially to the latter.

The intended contents of a cabinet should have some influence upon the construction of it, with especial reference to the number of compartments, their height, &c. One intended to contain mineral specimens would be quite unsuitable for displaying

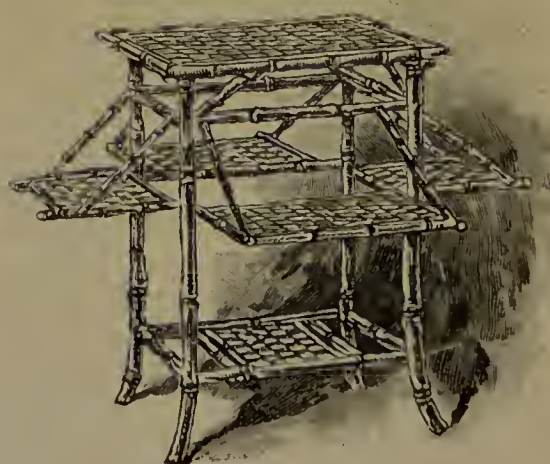


Fig. 4.—TABLE FOR AFTERNOON TEA.

rare china, though it might possibly do very well for medals or small bronzes. Systematic collections of any extent, however, are not often very suitable for decorative cabinets, requiring more accommoda-

tion than would be suitable in a drawing-room. They will usually, at all events, require furniture specially designed for them, if they are to combine the systematic arrangement which is necessary with decorative effect.

What-nots may almost be regarded as a species of skeleton cabinets, being filled with all manner of *bric-à-brac*, which adds to the domestic appearance of a room. One or two, or more, always come in useful in giving a cosy and furnished appearance, while they occupy scarcely any space. It may be taken as almost a general rule in drawing-room furnishing that a corner or recess should be occupied with *something*, and very often an appropriate what-not will solve the difficulty with very little expense, and almost no demands upon space which perhaps can ill be spared. Some very pretty what-nots are made with mirrors at the back—being almost, in fact, cabinets with sides and front removed.

Dwarf book-cases, and nests of drawers, are also useful articles in a drawing-room.

Minor Fittings.—

The appearance of a drawing-room is often greatly improved by fixing on the walls, or in corners, simple brackets covered in velvet or plush, on which can be placed statuettes, or choice articles of any kind, or even an occasional plant. Matters of this kind give much scope for individual taste. The brackets cost very little, and can often be home-made and home-covered. For some articles, especially white statuettes, there must be a back standing up behind, that the colour may show them up by contrast; in other cases the article may need nothing but the wall behind, and the bracket only as a stand underneath.

A portfolio on a stand is also valuable to hold drawings or engravings that are interesting to look

at, and can be better examined than when framed and hanging up.

Open-faced mirrors are very much gone out of fashion, though useful in some situations to give light to the room. But all kinds of small mirror-work and shelves and brackets are made; and mirrors prettily framed, and *painted* by hand with bird or flower designs, are favourite articles of decoration. They, however, need placing with much judgment; as do the spots selected for *plaques*, and similar articles.

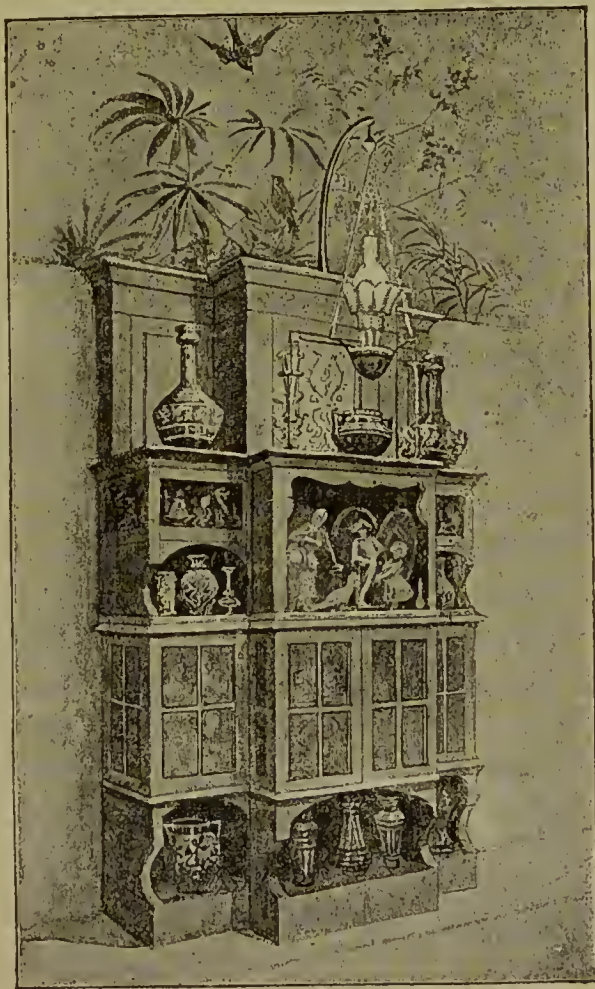


Fig. 5.—CABINET FOR CHINA.

Davenports.—A writing-table of some kind is often very convenient in a drawing-room, and the Davenport is a very tidy and comprehensive one, because ink, paper, stamps, letters, &c., can all be closed in and locked up so easily. A very usual price for such an item is £5, but it may be bought for far less at a sale, or a great deal more may be spent upon it.

Footstools.—Those who love comfort should have stools in every room in the house. There are fancy rush ones to be had in black frames with four legs, Oriental-looking hassocks, round ones that

stand on knobs, and, most comfortable of all, the large square stools like inverted boxes with stuffed tops. Milking and other fancy stools are more for ornament, or for holding things, than for the feet; but certainly the stool is a feature of the room of the day, that adds much to its ease and cosiness.

Screens.—The uses of screens are manifold; but until the last ten years they were comparatively rare, and always expensive. Now, however (thanks to the introduction of *Japonaiseries* and other *articles de luxe* of every-day application), they are almost common, and are to be bought from £1 and upwards in all sorts of colours and qualities. They are

most useful to screen off doors through which draughts enter, or to make cosy corners for easy-chairs or couches; while quite small ones are very pretty for hiding empty fireplaces, and many other purposes.

There is also much more variety in screens than formerly. The old-fashioned three-fold or four-fold screen, resting directly upon the floor, is very seldom seen in drawing-rooms unless as a remnant of olden times. The screen is almost always supported on legs, however short; three-fold are more common than four-fold; and double and single screens (Fig. 6) are more frequent than either. The hand-painting and other special decoration of screens forms quite a distinct branch of art, often practised by amateurs with success, to which we may refer on a future occasion; here it need only be said that the painting or other decoration must of course harmonise, or effectively contrast, with the rest of the room. It may be added that plain straight tops are now no more universal for folding screens than the old plain bottoms, and a three-fold screen is often made as a kind of triptych, the centre fold being highest, and the tops of all bounded by variegated or curved lines.

It is almost impossible to believe, without seeing it, how much the judicious use of a screen or two will improve some rooms. It often happens, when it has seemed impossible to make a room look really nice with other furniture, however selected and however arranged, that the placing of a two-fold or three-fold screen in a particular position changes the whole aspect of affairs as if by magic.

Morning-Room.—The furniture of a morning-room in large and luxurious houses is very much that of a drawing-room; but when it is simply a small sitting-room, where the mistress of the house sits with her work-basket or table, takes breakfast

with her husband while the family is small, or perhaps has her children about her, learning those lessons at "mother's knee" that are so much more satisfactory than when taken from nurse or governess, it is more of a utilitarian character. A small central table, or one that can be pushed aside or made smaller, is very desirable; and a well-made Pembroke is suitable. A few good plain

chairs of the shapes made so often now with rush or cane seats, two wicker easy-chairs, a work-table, some kind of plain writing-table or desk, and one or two dwarf movable cupboards (if the builder has not provided any), are most desirable for this room. Mother-families, too, will feel the benefit of a comfortable couch or sofa; for there are sure to be days when she will find it true wisdom to spend a few hours reclining while she mends stockings, or does many other pieces of domestic needlework which she would not care to carry into the drawing-room, were her only available sofa in that apartment. Still, we all have to

adapt ourselves to circumstances, and very often dining-room and drawing-room have to fulfil all purposes; and both are much better lived in, than kept in ever so small a degree for show.

Prices.—For a drawing-room the expense depends much more upon individual taste than for a dining-room. We emphatically recommend Brussels carpets for good, substantial, every-day wear, and the best Brussels at the present time is 3s. 9d. per yard; but the new-fashioned, artistic-looking Kidderminster (which, it must be remembered, require no making) may be had as low as a guinea and 30s. each. In any case, we reckon on stained or parquet or oil-cloth-bordered floors, and square or oblong carpets. A sofa may be considered a drawing-room necessary; and so are one or two easy-chairs, of the "saddle-back" or cushioned-wicker kind.



Fig. 6.—SINGLE AND DOUBLE SCREENS.

	£	s.	d.
Brussels carpet, bordered - - - - -	7	0	0
Lounge sofa - - - - -	5	5	0
Two occasional chairs, at 15s. each - - - - -	1	10	0
Easy-chair - - - - -	5	0	0
Two basket (enshioned) chairs - - - - -	2	10	0
Dwarf bookcase and cabinet combined - - - - -	10	10	0
Sutherland table - - - - -	2	2	0
Ebonised occasional table - - - - -	1	13	0
Corner what-not or cabinet - - - - -	1	18	0
Four fancy chairs, 7s. 6d. each - - - - -	1	10	0
Fender - - - - -	0	15	0
Fire-irons - - - - -	0	18	0
Total - - - - -	£40	12	0

The substitution of an artistic Kidderminster carpet, or the use of rugs on a stained floor, would reduce the cost of the carpet in this estimate by about £4;

and shelves put up in convenient places, and prettily covered, would obviate the cost of a bookcase and cabinet, at a saving of about £9; and with these omissions the drawing-room estimate might be brought to something like £27 12s. An overmantel, if desired, would cost about £2 5s. A piano very much depends on the musical proclivities of the master and mistress of the house. A grand or semi-grand piano may vary from £70 to £120, according to the maker. The best makers are, of course, expensive. But for ordinary people who perhaps play well, but are not *virtuosi*, there are really capital instruments to be selected, with a little care and inquiry, at from £36 to £40. On this head, however, we need not repeat the remarks already made.

ENTRÉES, HOT AND COLD.

ENTRÉES are a very important part of the dinner to some persons. Many people whose appetites are somewhat jaded, or who live at a high pressure in a hot and close atmosphere, are able to make a dinner off an entrée and game, when unable to dine off perhaps the more wholesome and satisfying joint.

Were we so disposed, we could write a book on this subject alone. But this is not a cookery book, or in any way intended to do away with the use of the cookery book.* We will, however, briefly run through sufficient representative entrées to serve as specimens, and which may be a guide to making a great number of similar dishes.

In the first place, it must be borne in mind that a great many entrées depend entirely upon the *sauce* that is served with them.

Sweetbreads.—There is no better illustration than that of sweetbreads. Suppose we take a calf's sweetbread. We first of all parboil it—that is, we half cook it by boiling it—and after it has boiled a short time, we take it out and throw it into cold water. When it is quite cold (and if it is summer it is all the better for a piece of ice being placed in the water), we take it out and trim away all the little pieces of flap and skin. Remember that calf's sweetbreads are very often expensive things, and they deserve considerable care in preparing them for the table. Next we lard the sweetbread.† Then we bake it in a brisk oven.

* For the methods of making all kinds of entrées, see "Cassell's Dictionary of Cookery," or a small and compact, but very complete book entitled "Cassell's Shilling Cookery," in which the dishes are classified.

† Full directions for larding will be given in a future chapter.

Now this sweetbread can be sent to table as an entrée under very many different names. For instance, we can cover it with tomato sauce, or we can mask it with béchamel sauce, or we can cover it with *sauce Médère*—that is, good brown gravy to which a little sherry has been added. Besides these, we can serve it with almost every variety of sauce known. Then we can have sweetbread *à la Cardinal*, &c. Still, this entrée is one and the same thing—a sweetbread served with sauce.

Cutlets.—We can also have entrées composed of beef, mutton, veal, pork, lamb, venison, larks, rabbits, hares, pheasants, partridges, woodcocks, &c. &c. One of the most common forms of entrée is that of mutton cutlets *à la* something or other; this something denoting, as a rule, simply the *sauce* which is poured over the cutlets when finished. There are various ways of cooking mutton cutlets; and as it is such a very common dish, and is so nice and wholesome as well, a few words on the subject will not be out of place.

Cutlets vary according to the nature of the establishment where they are served. There is, first of all, cutlet *à la* Mary Ann, which is simply a mutton chop, more or less greasy, that has been cooked probably in a dirty frying-pan, or by some method known only to Mary Ann herself. There is, on the other hand, that perfect little mutton cutlet as we should expect to get it served at a first-class club in Pall Mall; or an establishment like the Café Bignon, in Paris; or at Delmonico's, in New York. This kind of mutton cutlet comes to table in shape more like a large picnic biscuit; the outside is a bright golden-brown, while, rare event! the inside

is red and juicy. Alas! how often do we get a cutlet of this description in a private house? We may almost say, never. However, as a high-class model is always best for cooks, let us briefly describe the exact method of cooking mutton cutlets as they are served up in that admirable restaurant, Delmonico's, in New York; and we may here add that, thanks to the kindness and courtesy of the late Mr. Charles Delmonico—perhaps even yet more universally known as Charley Delmonico—we were, at a certain period of our history, allowed to have the run of his kitchens in New York, where we learned a great deal of how much can be done, by care and painstaking, where the guests are absolutely indifferent to the price they pay for their repasts.

The best mutton cutlets are made from neck or loin of mutton. The first thing to do is to bone the joint.* The under part or the fillet will make a little dish by itself, but should not be used for the *cutlets*, properly so called. It is as well to bear in mind the importance, in boning a joint, of keeping the edge of the knife *touching* the bone. By this means, if we have a loin of mutton, there is no waste; the whole of the meat is preserved. The fat can be run down to dripping; the upper part will make cutlets; the ends, too often left on the plates, and either thrown away or given to the dog, will make a very delicious Irish stew; while the raw bones will go into the stockpot and help to make soup. In fact, that nation of economical cooks, the French, who bone everything, simply follow out this maxim—that by taking a little *trouble* we can always avoid *waste*; and there is no joint, that is frequently used, so wasteful as the ordinary loin of mutton. In the first place, this unhappy joint, when roasted, even if roasted properly, possesses the unamiable quality of getting cold sooner than any other joint we know. The gravy seems to be studded with hard wafers of fat soon after the joint is sent to table; the roof of the mouth soon becomes clogged with mutton fat; the bones very often are sent down half-picked; and too often the end is left on the plates, to be thrown away. If the joint is “boned” originally, there is absolutely no waste at all.

But we must return to the cutlets. We now take the upper part, and having trimmed off nearly all the fat, and also cut off that piece of gristle that runs along the back of the joint just above the backbone—this gristle can also be put in the stockpot—we take the long piece of meat, and with a very sharp knife cut it into slices about three-eighths of an inch thick. If the cutlet is joined to a piece of fat in thickness the eighth of an inch, this will be ample: as when the cutlet is cooked, this eighth of an inch

* This process will also be treated of, with larding, in a future chapter.

will swell in size to more than double its width. We now take these little cutlets and pepper and salt them. This will be sufficient to make them dry. Sometimes it is advisable, if the cutlets are wished to be very nice, to sprinkle them with some powdered truffle or mushroom powder; we will not, however, enter into this part of the subject here, but will describe how to make mutton cutlets plain and simple.

Pepper and salt the cutlets sufficiently to make them thoroughly dry. Then dip them into some well-beaten-up egg, and throw them lightly on to some fine bread-crumbs that are dry. The bread-crumbs must be made from stale bread, and the means used to make them must be to rub this stale bread through a wire sieve. Take them carefully out of the bread-crumbs after they have been lightly breaded on both sides. Avoid patting them, as cooks will sometimes do, to make the bread-crumbs stick, and throw them on to a plate sprinkled with bread-crumbs, to prevent them from sticking. If possible, get the cutlets breaded in this manner some hour or two before dinner. The reason of this is that we wish to obtain a beautiful bright golden-brown colour, without over-cooking the cutlets. Now if the egg and bread-crumbs are moist, it will take some time for them to brown. If, on the other hand, they are dry, they will brown almost immediately; and this is what we want. The piece of meat of which the cutlet is composed is so thin, and the fat in which it is plunged is so hot, that a few seconds almost are sufficient to cook the meat, and those few seconds must also be sufficient to brown the outside. In the paragraphs on frying, full directions have already been given how to obtain the necessary heat; but we may remind the reader that the test of frying-fat for purposes of this kind is whether, if you throw in a piece of dry bread, it turns a bright brown colour immediately or not. If it does not turn brown within five seconds, it simply shows that the fat is not hot enough.

We place these cutlets in a frying-basket, then take the basket and plunge it into the large saucpan of boiling fat, taking care that the fat is sufficiently deep to *quite* cover the cutlets; and also that it is sufficient in quantity not to have the heat suddenly lowered by the plunging in of cold substances, such as a few cutlets. The proper time to cook them would be about thirty seconds; and if you follow the directions given, you will find that you are perfectly successful. Remember that the meat in a cutlet will go on cooking after it is taken out of the fat. Meat will cook when exposed to a temperature of a little over 200° Fahr. We all know water will boil at a temperature of 212°. When we speak of the cutlet cooking, we mean that the meat is surrounded by a thin film of egg and bread-crumbs

which has been heated to a temperature of about 500°. Of course, when the cutlet is removed from the fat, this heat gradually subsides. If the cutlet were eaten the moment it was taken out of the fat, it would absolutely burn the skin off the mouth. On the other hand, this film of heated egg and bread-crumbs continues to exercise its influence on the meat inside; and although probably if you were to cut the cutlet across the very second it left the fat, you would find the inside of the meat blue, if you wait a minute, or couple of minutes, this blueness will have gone away, and the cutlet will assume the appearance it should have—namely, that of a nice piece of properly cooked, though underdone, meat. In fact, it should look red, and not blue.

Now here are a variety of entrées which are formed by simply serving these cutlets, as we have said, *à la* something or other. For instance, we can have mutton cutlets *à la Chipollata*, that is, cutlets surrounded by what is called Chipollata ragout, or cocks'-combs, button mushrooms, truffles, and sausage balls served up in a rich brown gravy. Cutlets *à la Jardinière*, means that a variety of vegetables that may be in season, stewed in gravy, accompany the cutlets. Again, cutlets *à la Soubise* means an addition of Soubise sauce, *i.e.*, onion sauce rubbed through a sieve, and a little cream added afterwards. Cutlets *à la Milanaise*, means cutlets served with a rich sauce, with a border of macaroni flavoured with Parmesan cheese. Cutlets *à la Bretonne*, implies the addition of haricot beans, not haricot *vert*, but haricot *blanc* in the green state. These can be obtained in this country in tins. Cutlets *à l'Indienne* are curried cutlets, *i.e.*, curry sauce is served with them. There are also cutlets *à la Lyonnaise*, *à la Pompadour*, *à la Provençale*, *à la Russe*, *à la Bourguignotte*, &c., but space will not allow our entering into details, which can be found in any good work on French cooking.

Fillets.—Perhaps the most common form of entrée known, if indeed it can be called an entrée, is the ordinary fillet steak, or the *filet de bœuf* of the French. In other words, it is a filleted steak grilled or fried, only served with some sauce that gives it a distinctive name. Now this filleted steak abroad always seems to be more tender than it is when met with in this country. Probably one of the reasons is that French cooks take more pains to get their fillets tender than we do; and another reason is that abroad we nearly all, so to speak, dine out of doors, whereas our experience of the filleted steak in our own country is what we purchase from the butcher's. Now it is obvious, if an establishment sells on the average some 200 or 300 fillets a day, it is much easier for them to look ahead and get these fillets exactly into the right condition. In England,

rump steak is rather more expensive than fillet steak, whereas in France it is just the contrary. The fillet steak in most of the French towns is charged at the rate of two francs a pound, which is even dearer than the best rump steak at West End butchers'. When the fillet is cooked, it takes its name from the sauce in which it is served. Perhaps the simplest is that known as *maitre d'hôtel*. This is simply a piece of cold butter mixed with some finely chopped parsley; a lump of this is placed on the steak after it is cooked, and it goes to table in a half-melted condition. Another very common form of filleted steak as an entrée is with tomato sauce, or with *sauce Mèdère*; or it may be served with a quantity of vegetables known as *Macédoines*, consisting of the red part of carrots cut up into little pieces about the size of a pea, as well as similar pieces of young turnips and young green peas mixed in equal proportions. The vegetables are sold in tins which are labelled "*Macédoines*," and will be found exceedingly useful for making a pretty dish at a short notice.

Perhaps the best method in which *filet de bœuf* is sent to table is when it is cooked whole. In this form it can scarcely be called an entrée so much as a *removée*. In America the *removée* precedes the entrées, and in many of the best English houses now the same fashion is followed. We heartily approve of this fashion, as it seems more natural to have the solid *pièce de résistance* early in the dinner, and then to follow on with some light and rich entrées, instead of having the rich light things first, and the heavy meat afterwards. For instance, if a man is really hungry, he would prefer a good slice out of a haunch of mutton; and after satisfying hunger he would then be able better to enjoy the rich little entrée, like an oyster cutlet or oyster patty. To eat a rich light thing on a really empty stomach is, except to a small appetite and fastidious stomach, a mistake. We may be told that people who dine out are not supposed to be so vulgar as to be hungry. This, however, is all nonsense. The vulgarity consists in pretending to be ashamed of being hungry, and not in being hungry itself, which is simply a sign of health.

When the fillet of beef is cooked whole, it is usually larded. When the beef is thoroughly larded, it is generally cooked in the oven, and then the larding smoothed with a salamander, and the whole masked with some rich sauce. The different names the whole fillet will now assume, after having been larded and cooked, are very numerous. For instance, we may have a *filet de bœuf à la Milanaise*, which, of course, as the name implies, means some Italian mode of cooking. This, in its turn, naturally implies the introduction of macaroni and Parmesan cheese. Another form is *à la Napolitaine*. If we

recollect rightly, here the garnish consists of heaps of macaroni and cheese, and some Sultana raisins, besides some grated horse-radish.

Papillotes.—Another form of entrées are different kinds of meat which are cooked by being wrapped up in paper. Mutton cutlets are often cooked in this way, and are called by cooks *en papillote*, but the correct name for cutlets dressed in this manner is mutton cutlet *à la Maintenon*. This is a very delicious form of having cutlets; and as any kind of meat can be served in the same way as long as it is tender, we will describe how it is done. Small pieces of tender fillet of beef can be cooked in this way; and if you have a sirloin of beef in which the upper part is done, and the under-cut, as it is called, is extremely under-done—and this is often the case, owing to the large amount of fat that exists on the edge of the under-cut—it may be worth while to remember what an extremely nice and delicious entrée can be made the second day by cooking this under-done meat *en papillote* or *à la Maintenon*.

Get some sheets of paper—letter-paper is very good, but the blue cooking-paper which is sold for the purpose is better still. Let the cutlets be the ordinary size, similar to those we described a little while ago to be egg-and-bread-crumbed, and free from bone; or let the pieces of filleted steak be cut into small pieces of similar size, about three-eighths of an inch in thickness, about two and a half inches long, and one and a half wide. Next take a few mushrooms—half of one of the small tins will be ample, and these tins are now sold at about fivepence each. Chop up half a tin of mushrooms with a piece of onion about as big as the thumb down to the bottom part of the nail, and add to this a brimming teaspoonful of chopped parsley, and enough thyme to cover a sixpence. Put this in a small frying-pan with about two ounces of butter, and let it fry for a very few minutes. Pour this mixture off into a cup or plate, and dip the pieces of raw meat in this greasy buttered frying-pan, and just brown the outside without cooking them. This is best done by placing them on a very hot greasy frying-pan; but it must only be greasy, not of any depth of grease, otherwise they will cook and get soddened. Brown them as quickly as possible—first one side and then the other—and place them in the paper surrounded by some of the mixture we have mentioned. If you have a little sauce to spare, this may be added as well; but the cutlets are very nice without any sauce at all. Now take about three cutlets, and place them in the paper; then bring the paper over, and roll the edges together completely (after having first oiled the paper), so that when twisted the paper assumes the shape of a semi-

circle, very similar to the old-fashioned apple turnovers. Now place these in the oven—not too fierce, or else the paper will scorch; and after about a quarter of an hour or twenty minutes, they can be sent to table in the papers themselves.

Salmon is very often cooked this way on a gridiron; only this generally means a good charcoal fire, and what we may term a professional gridiron. More often than not it is done in the oven, and French cooks have the following trick, which is almost universal: if a piece of meat or fish wrapped in paper has been cooked in the oven, with a hot poker they make *marks* on the paper in streaks, like the marks of the bars of the gridiron, in order to convey the impression that the dish has been cooked in the orthodox fashion. After all, we must study appearances!

Vol-au-Vents.—Another form of entrées, and one that is always popular, is that of *vol-au-vents*. The meaning of the word *vol-au-vent* is something light and airy, and in cooking signifies a case made of the very lightest puff-paste; in fact, a *vol-au-vent* is simply a patty on a very large scale. Now these *vol-au-vents* owe their name to whatever mixture is put inside. We can have, therefore, *vol-au-vent à la financière*, or *vol-au-vent à la Toulouse*, or *vol-au-vent à la Nesle*, &c. We can also have *vol-au-vents* of fish, such as salmon or turbot.

We would, however, call the attention of our readers to the fact that if they obtain these *vol-au-vents* from the pastrycook's, they must have the inside sent separate from the case. This is really important. Suppose, for instance, you send to the pastrycook's for a little dish of patties, and they are sent in just before dinner (this is not uncommonly done when there may be one or two unexpected arrivals, and you want to make the dinner look a little bit better). The patties are sent in cold; the cook places them in the oven, and the result is that either the pastry is burnt almost to a cinder—or, at any rate, so heated that it becomes extremely brittle and unpleasant in the mouth—or the patty is sent to table so that the forcemeat in the middle is almost cold, while the pastry is warm. If you have to warm the patties—and this is virtually the same thing as making them hot when sent direct from the pastrycook's—the only way is to take off the tops of the patties and scoop out the whole of the inside. Place this inside in a small stewpan or saucepan, add generally a spoonful of gravy—either white or brown, according to the nature of the mixture—and make the mixture thoroughly hot. Then fill the patties again with the hot mixture, put on the tops, and place them in the oven. Now, of course, as soon as the pastry is hot, the whole is hot.

Suppose, again, we have a *vol-au-vent* for dinner one day, and half of it is left. It is a great deal too good to throw away. How, therefore, will you warm it up? Remember what has been said. Scoop out the inside, moisten it—if possible, with a little similar gravy—make this hot in the saucepan, then put it back in the case if it will bear it, or else heat the pastry separately, and put the two together in a dish at the last moment; it will then be as good as it was the first day.

Game and Cream.—Another very delicious form of entrées are those which have become lately so fashionable, and which are made of a mixture, strange as it may seem, of game and cream. Have you ever tasted partridge cream, or grouse cream, or pheasant cream? If not, all we can say is, if you are fond of game at all, you have a great treat yet to come. Another good point is that these delicious entrées are by no means so difficult to make as many people would imagine; they, however, require real game and real cream, both expensive luxuries in their way.

Suppose you have left, say, the remains of some partridges, and you wish to make a little entrée of partridge cream, proceed as follows:—Cut all the meat from the bones (we presume, of course, that the birds have been cooked), break up the bones, put them in a small saucepan with just sufficient gravy to cover them, and let them stew as long as you like, and make what French cooks call a *fumet*. At all events, you make, by this means, a sort of essence of the game. It must be very little and very good. In the meantime pound all the meat with a pestle in a mortar, and then rub it with a wooden spoon through a wire sieve.

Aromatic Herbs.—You will now want to add to this some herbs, which are known in French kitchens under the name of aromatic flavouring herbs. As these aromatic flavouring herbs form a very important item in high-class cooking, we had better describe how to make them. The object of these herbs is to give a gamey flavour to anything you make; therefore, in making game pies of any description, such as lark pies, or imitation game pies from liver and bacon (which are exceedingly nice, very good, and very cheap), these herbs are invaluable. They are sold by some of the best grocers in little bottles under the name of Herbaceous Mixture, but it is far best to make them at home. We will describe how to make a fairly large quantity, and, of course, by dividing these quantities into equal parts, you can make half or even one-fourth. Take two ounces of white peppercorns, two ounces of cloves, one ounce of marjoram, one ounce of sweet

basil, one ounce of thyme, one ounce of nutmeg, one ounce of mace, and half an ounce of powdered bay-leaves. The herbs should be wrapped up in stiff paper and dried in the oven. The nutmeg and mace, of course, are already grated. The peppercorns and cloves must be pounded thoroughly in the mortar with the herbs, and the whole mixed together, and then passed through a fine sieve, and placed in a *glass-stoppered* bottle. This quantity will be sufficient to last a large kitchen for more than twelve months; and if the mixture is kept in a bottle properly stoppered, it will keep good for years. If, however, it is kept in an ordinary bottle, with a badly fitting cork, the aromatic flavour will very soon evaporate.

Sufficient of this mixture to cover a sixpence must now be added to the pounded meat in the pestle and mortar. The little drop of *fumet*, or essence of game, in the saucepan (which we suppose has been boiled away until not much more than a wine-glassful is left), is also added to moisten it, and then sufficient cream to make the whole into a thick paste. You now take a well-oiled mould and press the mixture in, and put it in the oven to get thoroughly hot, placing a piece of buttered paper over the edge to prevent it from burning. When it is thoroughly hot, the mould is simply turned out on to a dish, and sent to table.

This is an admirable entrée for old ladies or gentlemen who labour under the disadvantage of having lost their teeth; and it is astonishing to see with what relish they generally attack this extremely nice entrée. Nephews with maiden aunts from whom they have expectations would do well to bear this recipe in mind.

Patties.—But to return to our entrées. Another very important class of entrées is that known as patties. We have already described how to make the interior of an oyster patty, when describing how to make oyster cutlets (page 140, Vol. I.); but a very large number of other patties may be made by simply filling the patty-cases with different kinds of forcemeats, or, as they are sometimes called, savouries.

Mince.—One of the most important of these is what we might term high-class mince. We do not here mean the ordinary mince of every-day life, which is generally made by using up the remains of the pieces of meat, although a few words on this subject may not be amiss by-and-by.

But we will first describe how to make what may be called really high-class mince, or what the French call *salpicon*. It is much more simple than many people imagine. Suppose, for instance, you have some of the remains of the white part of a fowl,

such as the breast: cut this up into small square pieces like very small dice. These should be mixed with some pieces of the red part of a tongue, also cut up fine, some ordinary mushrooms such as are obtained in tins—not the large black mushrooms used for grilling, which are utterly unsuited for the purpose, but the small white mushrooms which can now be obtained so cheaply in tins, and which are much cheaper than they used to be years ago. If possible, add to this some small pieces of truffle. If you get large truffles, they are very expensive; but if you know how to go to work, you can get what are called truffle-chips. These are admirably suited for the purpose, as we do not require truffles cut in slices.

We now have these four ingredients. All they require is moistening with some very good béchamel sauce—or, still better, the sauce described under the name of *suprême*. If this sauce is properly made, when this mince is cold it becomes a hard firm jelly, and in this form can be used in a variety of ways. For instance, we can egg-and-bread-erumb small slabs—or, still better, roll it into small round balls. We can dip these into batter and serve them in the shape of fritters; or, having dipped them into a well-beaten-up egg, roll them in some vermicelli, and afterwards fry them in hot fat until they are a nice brown colour outside. Mince of this kind will also make kromeskies, although for this purpose it is far better to have a finer kind of forcemeat. Indeed, this mince makes excellent forcemeat simply by rubbing it through a wire sieve. Real forcemeat is made by mixing chicken or veal and mushroom with some of what is called Panada bread. Panada bread is made by taking the crumb of a French roll and steeping it for a moment in boiling water, then wringing it out and pounding it in a mortar with some hard-boiled yolks. Then you mix some plain yolks so as to make it a paste. To this should also be added some veal rubbed through a wire sieve. This is useful for making various kinds of forcemeat, which only require different kinds of flavouring to make different dishes.

Kromeskies.—Kromeskies are made by taking a small piece of rich forcemeat of this description, and then surrounding it with a slice of fat bacon—cut off a piece of bacon that has been previously boiled, as thin as it is possible. Were we to say that the bacon should be cut as thin as a five-pound note, it is of course only a figure of speech to show that you cannot cut it too thin. When this piece of forcemeat is wrapped up in the bacon, it should be dipped into batter and fried. Of course, on being cut open, this thin piece of bacon adds very much to the richness of the dish.

Soufflés.—Another form of entrées are known under the name of game soufflés. Perhaps—though it is here a little out of place—we may describe, first of all, how to make a cheese soufflé. This is a very cheap, and really, considering how nice it is, economical dish, because it is an admirable way of using up the dry pieces of cheese which would otherwise be thrown away altogether. Suppose we take the remains of an ordinary large piece of cheese—Cheshire, Cheddar, American, or, still better, Parmesan. The cheese must, first of all, be grated finely, and it should be dry. Let us take about four table-spoonfuls of grated cheese, a quarter of a pint of milk, and two eggs. First of all, the eggs should be beaten till they become a stiff froth, and for this purpose it is better to beat the yolks and whites separately. The yolks should be mixed in with the milk and the cheese first, and then the whites of the eggs should be beaten to a stiff foam. This is really very easily done, and for the purpose you can use either a whisk, which can now be obtained for a very few pence, and in which the result is obtained by turning a handle; or, for practical purposes, you can beat up the white of eggs to a foam or froth with a knife or fork. Next take a deep tin—like a small cake-tin—and butter the inside well; add the milk, cheese, and yolk of egg after the yolks have been well whipped to this stiff froth. Mix all together as lightly as you possibly can, after having first flavoured with a little pepper and salt; and pour the mixture an inch deep into the buttered tin. This should now be placed in a tolerably fierce oven. The mixture, which only came up in the bottom of the tin to one inch, will now rise in the tin to quite five or six times its original depth. Great care should be taken in serving the soufflé that it should be conveyed *directly* from the oven to the dining-room. A soufflé to be eaten in perfection would require a waiter who was an ex-champion runner.

The reason of this is, that the moment the soufflé is taken from the oven it begins to fall. The fact is, the soufflé depends upon that well-known maxim in natural philosophy, that heat expands. The mixture of milk, egg, and cheese contains an innumerable quantity of small bubbles of air, owing to the eggs having been whipped to a froth, each tiny bubble perhaps not being bigger when the mixture was poured in than a pin's point. After the application of the heat, however, each bubble becomes as big as a pin's head, and therefore the whole mass increases in bulk quite six-fold. When, however, the soufflé begins to cool, it begins to contract again; and consequently, unless it is served immediately, the soufflé which was brimming over the tin at starting from the oven-door, will have shrunk half-

way down the tin before it reaches the dining-room table. It is always customary to wrap the tin in a napkin. Now, if you take the soufflé out of the oven, and fold the dinner-napkin round it, and pin it, this being a work of time, you will, of course, find while you are doing this that the soufflé begins to go down. Act, therefore, as follows:—Before putting the tin in the oven, get a plate, and fold a dinner-napkin to go round it easily. Have this plate and folded napkin ready and warmed, and when you take the soufflé out of the oven, simply drop it into the napkin, and let it be served immediately. Also, we should warn the cook against taking the soufflé out of the oven until the man or parlour-maid is ready to take the dish from her hands *immediately*. It is just taking these little precautions that makes all the difference in the world between having a proper soufflé and a failure.

Now, in making a game soufflé, you proceed exactly as if you were making a cheese soufflé; only, instead of putting in the grated cheese, you put in a rather smaller quantity of powdered game; that is, game that has been cooked (not omitting the inside and the black part), and has been rubbed through a wire sieve; and, also, you can add a spoonful or two of the liquor which is made by stewing some of the game bones down until it is almost a thick glaze. You may also add to every four table-spoonfuls of powdered game a sufficient quantity of those aromatic flavouring herbs spoken of a little while ago to cover a sixpence. This very much helps to bring out a strong flavour of game.

Rice Borders.—Another very useful kind of high-class entrées are made by serving various kinds of rich forcemeat, ragouts, &c., in a border made of rice. These rice borders are easily made, are by no means expensive, and ought to be used much more frequently in private houses than they are at present. Take any quantity of good Carolina rice, which is generally considered the best. Have the rice first of all thoroughly washed, and then put it in a saucepan to boil—in some fairly good stock if the rice border is intended for an entrée, or put the rice to boil in some milk if it is intended for a sweet.

Now, there are various ways of making up the rice into borders, some of which are more economical than others. The ordinary way pursued in a first-class French kitchen, where perhaps economy is not always considered so much as it should be, is to place the rice, after it has been thoroughly boiled until it is quite tender, in a large basin or mortar, and work up the mass perfectly smooth with a wooden spoon, until it becomes like a white paste, adding one or two well-beaten-up eggs, which

will cause the mixture to set when it is baked. Only sufficient stock should be put to the rice, so that the whole is absorbed by the rice itself. When this smooth paste is thoroughly worked together, roll the whole of it with the hands into a large round ball, like a cannon-ball, then with the hand flatten it until it assumes the shape of a foreign “Dutch” cheese; that is, it will be about three or four inches in height, and about eight inches in diameter. Next, the outside of this can be ornamented, similar to a mould of jelly that has been put into what is called a fluted mould. For this purpose it is important that all the indentations should be exactly the same size. To do this, the easiest way is to take an ordinary carrot, and, with a scoop, cut out a slice so as to make it hollow, very similar in shape to the cheese-scoops that grocers use for tasting purposes. If you take this carrot and go round the outside of the rice mould, and press it gently, the mould will contain a circle of round buttresses, so to speak. This should now be painted over with clarified butter gently with a brush, and the whole placed in the oven until it is baked a nice bright golden-brown colour. Then take it out of the oven, and with a spoon scoop out the whole of the inside, so that there is a large hollow surrounded by a wall of rice about one inch in thickness all round. This centre can now be filled with any kind of ragout, mince, &c., and so be sent to table. For instance, we can fill a rice mould with some of the same mixture we described when speaking of *sauce à la financière*, or *financière* ragout; or we can fill it with some of the rich mince, previously described, made from the black truffle, red tongue, white chicken, and mushroom. These entrées are exceedingly pretty and very seductive.

When the rice border is used for the purpose of sweets, the rice should be boiled with milk instead of stock. The milk should be sweetened, and have some flavouring added to it, such as essence of almond—still better, essence of vanilla. The rice should be baked until it is firm, but should not be allowed to get a golden colour at all, as it looks far better perfectly white. The interior of this rice mould can now be filled up by simply emptying into it the contents of a tin of apricots. The top of the apricots can be ornamented by placing a little red preserved cherry here and there, and a few thin pieces of cut green angelica, which can be stuck into the rice border itself, and also into some of the pieces of apricot. This is an extremely pretty dish, as the white border contrasts well with the yellow apricot, the red cherry, and the green angelica.

A more economical way of making rice borders is to take two cake-tins—one larger than the other, so

that there is about an inch between the two tins. Butter the inside of the outside tin, and the outside of the inside tin. Place the mashed-up rice in the space round the edge. Then put the tins in the oven, and bake the rice until you think it is tolerably firm; now place a dish over the outer tin, and turn it upside-down, and remove the tin. Then take the inner tin away, and you have a perfectly round rice border, the outside of which is plain. This can now be filled either with meat for an entrée or with fruit for a sweet. In private households it is better to try this rather than moulding with the hands, which can be done, and sounds very simple; but when you come to try it, you will find that hand-moulding requires a considerable amount of experience. It looks so easy when you see an accomplished French cook do it, that you think you can do it yourself when you get home; but the result is something like going to an artist's studio and seeing him carve the human face out of a block of marble, and thinking if you only had a chisel and hammer and a piece of marble you could do the same yourself. We all know what the result would be.

Cold Entrées.—We will, in conclusion, have a few words to say on the subject of cold entrées. Cold entrées are very useful in giving little dinners in small households where the cook is somewhat inexperienced. The one great advantage of cold entrées is that they can be made beforehand; and consequently there is no fear of a failure. Besides, supposing you are giving a little dinner-party, by having a cold entrée, which can be ready in the room beforehand, you give the cook time, so to speak, to pull herself together. Suppose the not uncommon case of the entrées being followed by a haunch of mutton and a couple of boiled fowls. These require time to “dish up.” There is the white sauce to be masked over the fowls, which require ornamenting as well; also there is the gravy for the haunch, which should be left hanging before the fire if an open one, or left cooking in the oven till it is wanted. But the gravy has to be made as well; now if the cook has to see to one or two hot entrées as well, she is naturally much pressed for time, unless she is an old and experienced hand.

In all cold entrées, one very important element is aspic jelly, which can be obtained very cheap in bottles. Aspic jelly is often used to make the entrée itself, as well as to ornament it after it has been made.

A very nice cold entrée is made by serving *foie-gras* cut in slices in aspic jelly; but as *foie-gras* is obtained in tins, we will reserve a description of this dish till we come to consider tinned meats, &c., later

on, and will now describe how to make a border of aspic jelly, which can be filled with a variety of things, from the nature of which the dish will take its name.

To make a border of aspic jelly we require, properly speaking, an “aspic border mould.” This is a copper mould of circular form, hollow in the middle. It is, however, possible to make an aspic border by means of two cake-tins—one inside another—leaving a circular rim of about an inch round, as described just now for the rice border. As nearly every kitchen contains a couple of cake-tins—one being, say, five inches in diameter, and the other seven inches—this method will be easily followed by all. If you place one tin inside the other, you will have a circular hollow space between the two tins an inch in width all round. The idea is to fill this space with aspic jelly, and then to turn it out so that you have a ring of aspic jelly with a hollow space in the middle five inches in diameter, while of course the outside of this ring will be seven inches. This interior can be filled with a variety of cold substances, such as little joints of cold game covered with a rich cold jelly, or fillets of soles boiled and covered with green mayonnaise sauce, &c.

But first with regard to the ring of aspic jelly itself—how to make it, and how to ornament it. To make it properly, you will require ice, and of course the best thing is to have chopped ice mixed with salt.

First, place the outer tin in some ice, and put some ice inside the smaller tin. If you are making this dish for a Christmas party, you cannot have anything better than snow. Next, procure a small black truffle and one or two hard-boiled eggs. Truffles are expensive; but if you have a small tin of *pâté de foie-gras* in the house, you can sometimes pick out a nice piece of truffle that can be used for ornamental purposes.

As we want black and white substances to contrast, it is just possible, instead of truffle, to substitute the outside of a pickled walnut; but we will suppose you have a truffle, and will describe how to make the dish, and leave it to your own ingenuity to think of something equally ornamental that will do instead of a truffle. Take the truffle and some of the white of an egg, and cut out some kind of shape, such as a round or a star, and place these equally and alternately at the bottom of the mould; and then with a spoon take some liquid aspic jelly and pour it over them all round, so as to cover them without moving them. Gradually pour a little more jelly round, and thus fill up the ring to the top, and wait till it is perfectly set in the ice.

Now turn out the mould. This is easily done, as

a rule, as you can ease the jelly round both the outside and inside of the ring with a thin knife. When the mould is turned out, of course the little stars of black truffle and white of egg will be round the top of the ring, embedded in the jelly. The effect is very pretty. Now we can fill the hollow space with what we like. Suppose we have filleted sole, each fillet being dipped in mayonnaise sauce. We can pile these fillets up in the centre of the hollow mould of aspic jelly, and sprinkle some with black chips of truffle outside, and some with little pieces of chopped green parsley; and if we want to make the dish look very pretty, we could place a black truffle on the top with a silver arrow run through it, and some small white hearts of lettuces round the dish outside the bottom of the mould of aspic jelly, alternately with the whole yolks of hard-boiled eggs.

Cold Chicken Cutlets.—There is one more dish we will describe in conclusion, which also makes an exceedingly pretty cold entrée, and which you cannot fail to make if you take pains. We refer to cold chicken cutlets. To make these, you must have some really good béchamel sauce or *sauce suprême*, which when cold should possess these two properties:—It should be a *hard* jelly, and also a pure *white*. You will therefore require a small amount of cream in making this sauce; but as a very little sauce will be amply sufficient to make a good dish of cutlets, it will not require much cream. Half a pint of sauce will be enough for our purpose.

These cutlets can be made from the remains of cold fowl and a cold ham. Cut the fowl into thin slices; do not *mince* it, but slice it as thin as possible. It does not matter how large or how small these slices are, as they will all stick together later on. Next take a large flat dish, and dip these slices of fowl in the hot liquid sauce, and cover the bottom of the dish; only do not let one slice get over another.

Then cover these slices of fowl with slices of ham cut as thin as possible. The ham will stick to the fowl on account of the sauce. Take some more slices of fowl and dip them in the sauce, and cover the ham, so that you have a large sandwich, in which a slice of ham lies between two slices of fowl. Cover the top with the sauce, so that it presents a smooth white surface. Now let the whole get cold, then with a sharp knife cut it into little cutlets, and with a knife lift each little cutlet out. Of course the edge of the cutlet will show the meat—viz., the chicken and ham. Dip each cutlet into some more sauce, and then let them get cold.

Now stick a little piece of the small red claw of a crab or lobster into each cutlet to represent the bone, and then in the middle of each place a little star of truffle ornamented with a little red lobster coral; or, if you have no coral, you can ornament them with some parsley or the skin of a red chili. To make these little pieces of red and green, or green and black ornaments stick, a little drop of the liquid béchamel sauce will be found amply sufficient.

These cutlets can now be placed in a circular pattern round a silver dish, and some chopped aspic jelly piled up in the centre. If red coral or red chili has been used in ornamenting this cold entrée, and if also truffles have been used, a very great improvement to the appearance of the dish will be to place four small red crayfish, one in each corner of the dish, and four small black truffles between each, at the sides of the dish. This, of course, makes a capital supper dish; but it is equally nice as an entrée at dinner.

Another very nice and simple cold entrée is made in the same way by placing thin slices of *pâté de foie-gras* alternately with slices of cold roast or boiled fowl, and filling the centre of the dish with aspic jelly, either in slices or chopped small and piled up in a heap.

THE TREATMENT OF EMERGENCIES.

Drowning.—Death by drowning is unfortunately of very common occurrence in our sea-girt island, and the frequency with which this accident happens is increased by the fact that a large proportion of our sea-faring folk have never been taught to swim. When a man falls in the water, he generally makes some effort to save himself. If, unfortunately, he should have no knowledge of the art of swimming he loses his head, and his struggles are not only unavailing, but quickly exhaust his strength. Even a good swimmer may soon find himself in difficulties if embarrassed by a rough sea, a strong

current, or a high wind. Fear quickly paralyses the muscles, rendering a person incapable of further action. Intense cold arrests the action of the heart, and may induce gasping breathing, so that air is drawn into the lungs. Dr. Gny gives the following graphic account of death by drowning:—"When a man falls, or is thrown into, the water, he soon sinks to a greater or less depth, but almost immediately rises to the surface again; and, if he is a swimmer, makes efforts to save himself, till at length he is reduced to the condition of one who cannot swim at all—with this difference, that he has already

exhausted the strength which the other had in reserve for the death-struggles common to both. These struggles consist of irregular movements of the arms and legs, and graspings of the hands at all objects within reach, whether floating in the water, fixed at the bottom, or growing on the banks. In the course of these irregular movements, he rises repeatedly to the surface, tries to breathe, and takes in air and water. The contact of the water with the windpipe causes a cough, by which part of the fluid is rejected, and with it some air from the lungs. This occurs again and again, till the body no longer rises to the surface; water alone is received in the vain efforts to respire, while forcible involuntary

pounds of cork cut into pieces, properly arranged, and covered with painted canvas, will sustain six persons weighing each ten stone, so that from three to four pounds would sustain one person; although, as a matter of precaution, it would be better to allow six or seven pounds. A life-buoy should always be arranged under the armpits in such a manner as not to impede respiration or the free use of the arms.

It may, perhaps, be useful to mention that the "pole drag" used by the Royal Humane Society is made of light but strong iron fixed with a socket to a pole of wood sixteen feet long. The "rope drag" is made, somewhat like a ship's anchor, of strong iron with hooks at the end of each arm and a long rope



Fig. 1.—SYLVESTER'S METHOD: FIRST POSITION.

expirations continue to expel the air from the chest. At length all these efforts cease, the body sinks to the bottom, and bubbles of air are forced from the chest by the elastic reaction of its parietes. The greater part of the water which has entered the mouth finds its way into the stomach, the rest into the lungs; and this residue, mixed with the secretions of the mouth and air-passages, and frothed by the air inspired and expired, forms the foam so constantly met with in persons who have perished in this way."

In exceptional cases the mode of death is somewhat different, for the skull may be fractured by striking the head against a stone, or a rock, or a post, or even against the mud at the bottom of a river. Some people when immersed in water float more readily than others. For example, fat people sink with greater difficulty than those who are spare; and women are more buoyant than men. A very small quantity of cork will suffice to maintain a person afloat. It has been calculated that twelve

at both ends, so that it may readily be pulled in either direction. This drag is used for water which is too deep for the pole drag. The cork life-buoy is a circle of cork covered with canvas, and furnished at the circumference with cords to hang down, so that they may be readily seized by any one struggling in the water. A long line should be attached to it so as to pull in any one to whom it may have been thrown. This apparatus is very inexpensive, and no more useful present could be made to the inhabitants of any town or village where deaths by drowning are of common occurrence. The drags used by the Royal Humane Society are made by Mr. Dunham, of Whitefriars Docks; whilst the buoys and hand-lines are furnished by Messrs. Birt and Co., of Dock Street, London Docks. The offices of the Royal Humane Society are at 4, Trafalgar Square, London, W.C.

The question of the treatment of cases of drowning is one of considerable interest. It is hardly necessary to say that after immersion for some hours, no efforts

are likely to prove of the slightest avail. If, however, the period should not have exceeded one hour, an effort should be made to restore life. The treatment should be commenced at once in the open air whilst dry clothing and blankets are sent for. In order to get rid of the water in the mouth, the patient should be turned over for a moment so that it may drain out, the tongue at the same time being drawn forwards with the fingers or any instrument that may be at hand. A piece of string may be threaded through it with a needle so as to hold it firmly—a procedure which need not occupy more than a second or two. The feet should then be fixed, and Sylvester's method of artificial respiration at once com-

pleted with a couple of ounces of warm water or soup and injected into the bowel. The efforts to restore consciousness should not be abandoned for at least an hour, and the patient should not be left alone till he is perfectly sensible, for a relapse is not unlikely to occur.

Hanging.—Death by hanging may occur as the result of suicide or accident, as well as by the operation of the law. With respect to suicides, it may be mentioned that to insure death it is not necessary that the feet should be off the ground. Some years ago a prisoner was found dead, hanging from the bars of his cell-window by means of his shirt rolled up so as to form a slip-knot. The curious point was



Fig. 2.—SECOND POSITION.

menced. A pillow or a folded coat should be placed behind the shoulders, and the operator, standing at the head of the patient, should grasp the arms above the elbows, and draw them well over the head, keeping them in this position (Fig. 1) whilst he slowly counts five. The arms should then be pressed down against the sides (Fig. 2)—this manoeuvre being repeated fifteen or sixteen times in the minute, and continued until natural breathing is established. The great point is not to go too fast, and the time should be checked by an assistant, watch in hand. The bystanders may be usefully engaged in removing the wet clothes, applying hot flannels to the stomach, and chafing the legs. The application of strong smelling-salts to the nose may be useful; but nothing must be allowed to interfere with the efforts to induce artificial respiration, which should not be relaxed for a moment. Directly the power of swallowing is established, a teaspoonful of hot brandy and water should be administered; or, if the appliances are at hand, it may be mixed with a

that he was almost seated on the window-sill, his feet resting on the ground. It would at first sight appear hardly possible that death from hanging could occur by accident, and yet this is undoubtedly the case. Some years ago a little girl swinging in a brew-house accidentally caught her neck in a noose attached to a pulley used to hoist up sheep, and was suspended by it until she was dead. Gymnasts have been hanged by the rope on which they were performing catching them round the neck. There is a well-authenticated case of a man who stole a sheep, and, after walking with it some miles, lay down to rest. To prevent the animal from escaping, he secured it with a piece of rope, which he tied round his own neck. When he was asleep the sheep pulled the rope tight and strangled him. At various times people have given public exhibitions of hanging for amusement or profit, and more than once they have proved unexpectedly successful. Scott, the American diver, died from hanging during one of his performances, probably from the shifting of the rope. On

another occasion at a hanging exhibition the experimentalist was equally successful; and the audience had so little suspicion of anything being wrong that he was allowed to hang for thirteen minutes, amidst the greatest applause, before any attempt was made to save him. Over and over again boys at school whilst "playing at hanging" have met with an accident; and on several occasions two or three boys have combined to hang their baby-brother, not from any dislike or ill-feeling, but simply out of pure curiosity, and as a result of reading an account of some public execution.

The treatment of a person found hanging is very simple. The first thing is to cut him down—not to run for assistance. A knife or pair of scissors used energetically will soon sever the rope. All tight clothing should be removed from the neck and chest, and artificial respiration should be at once commenced, according to the method already described when speaking of the treatment of the drowned. Sal volatile or smelling-salts should be given to inhale; or snuff or pepper may be blown up the nostrils, so as to induce sneezing. The legs should be rubbed, hot bricks should be applied to the soles of the feet, and the patient should be kept warm. Splashing cold water in the face from time to time is useful. When other measures fail, bleeding may prove efficacious. The tongue should in all cases be drawn forwards.

It is not known exactly after what lapse of time life may be restored; but a case recorded by the late Dr. Taylor may serve to throw some light on the subject. A robust healthy woman, thirty-three years of age, hanged herself whilst intoxicated. She was missing about ten minutes, but the exact time of suspension can only be inferred. Medical assistance was obtained ten minutes after she had been cut down. She was then quite insensible, the pulse was barely perceptible, and the breathing was slow and laborious; her face was pale, the lower jaw was sunken, the hands were convulsively clenched, the pupils were dilated, and failed to contract to light. There was a dusky red mark a quarter of an inch wide round the upper part of the neck, caused by the silk handkerchief she had used as a rope. Hot water was applied to the feet, mustard to the calves of the legs, and cold water to the head, and she was bled freely from the arm. After thirty-two ounces of blood had been removed, the breathing became decidedly worse, the pupils dilated fully, the jaw dropped still more, and she appeared to be sinking. Her chest and body were rubbed with strong ammonia liniment; in an hour more she could swallow, but remained profoundly insensible till the evening, although drowsily conscious of pain. She ultimately recovered. Another case which occurred many years

ago is also worth quoting:—A man, aged twenty-eight, very vigorous and very muscular, was hanged for murder at ten o'clock in the morning. At twenty-five minutes past ten he was cut down, but the rope was not untied. No impulse or sound of the heart was perceptible, the face was purple, the tongue was not protruded, and the eyes were not staring. At forty minutes past ten the rope was removed, and also the ligatures binding the arms. At 11.30 a regular pulsation was noticed in one of the veins of the neck, and this was found to depend on the heart, which was then beating eighty times in the minute. The chest was opened by the surgeons, who found the auricles beating at the rate of forty in the minute, and this continued with gradually decreasing frequency until a quarter to three, when the pulsations finally ceased. It seems more than probable that had any effort been made in that direction life could have been restored. In cases of accidental hanging, efforts to re-establish the action of the heart should not be abandoned.

Suffocation may arise from a number of different causes—for example, the impaction of food in the windpipe, strangulation, and smothering. The treatment of foreign bodies in the throat and air-passages will be mentioned in a chapter upon "Household Surgery." Many curious cases of suffocation have been recorded from time to time. Some years ago a groom was found dead with his head downwards in the iron rack used for feeding horses, his legs projecting through an opening in the floor above. The most probable explanation seems to be that in reaching into the hole he had overbalanced himself and had fallen head-foremost into the soft hay below. He had evidently fallen in such a position that he was unable to escape. Suffocation has been resorted to as a means of committing suicide. A woman confined in prison was found dead in bed. A post-mortem examination was made, and a certificate was given that death had resulted from apoplexy. The body was sent in due course to one of the anatomical schools for dissection, when it was discovered that she had committed suicide by thrusting a plug of cotton-wool into her throat. These cases are not uncommon in prisons. Children are undoubtedly often suffocated intentionally; and the infant mortality from this cause alone is said to amount in this country to some hundreds annually. A strong man might be easily suffocated if overpowered and held face downwards in some soft substance, such as a feather-bed. There would be nothing left to tell the tale unless there were signs of a struggle having taken place. Children are often smothered in bed by what is called "overlying." The parents come home late,

either intoxicated or heavy for sleep, and during the night one of them rolls over on the child and death ensues. In one year 125 deaths were registered as having occurred from this cause, and the late Dr. Lankester, within a very short period, held over 200 inquests on children found suffocated in bed. Children are sometimes smothered by being wrapped up too closely. Not long since a woman was travelling by steamboat on a cold winter's night, and to keep her child warm enveloped its head in a shawl. The child was quiet, and seemed to sleep soundly, but on being uncovered was found to be dead. Nursemaids are sometimes seized with a mania for suffocating their charges, and many instances of this kind have been disclosed in our criminal courts.

The principles of treatment recommended are almost identical with those which have been indicated in cases of drowning. *The first point is to examine the throat*, and remove any obstruction which may be present. The fingers will usually suffice for this purpose, the mouth being held open by a cork thrust between the teeth; but a pair of surgical forceps, or a hook fixed in a wooden handle, such as a penholder, will be found serviceable. As soon as the throat is cleared, artificial respiration must be commenced, and should be kept up steadily by relays of assistants for a couple of hours at least.

Coal-Gas Poisoning.—Few people seem to realise the fact that ordinary coal-gas is poisonous, and will produce death by suffocation. A person goes to bed with the gas lighted in his room, and either forgets to turn it off, or falls asleep when reading. When the family retire to rest, the gas is cut off at the meter, and the light goes out. In the morning the servants rise early, and turn on the gas, either for lighting purposes or for the gas-stove, the result being that the gas escapes freely into the bedroom. Should the sleeper be disturbed, he notices the smell; but should he be a heavy sleeper, he inhales the gas, and sleep may pass gradually into death. After a time, the smell of gas is noticed in the house, and some one goes to his room, but it is then often too late. A few years ago a man was found dead in his bed, and there was a strong smell of gas in the room. The burner was turned off, and on investigation it was found that the gas had escaped from some small holes which had been accidentally made in the gas-pipe by driving nails into a plank in the floor. Country-people who are not used to gas, on a first visit to London sometimes *blow out* the gas in the bedroom on retiring to rest, and suffer in consequence.

It is not known exactly what percentage of gas in the air of a room would suffice to kill a person,

but from seven to twelve per cent. will prove fatal to dogs, and it is probable that ten per cent. or even less would produce dangerous effects in a man. The symptoms induced are headache and giddiness, loss of memory and power of moving, profound insensibility, dilated pupils, laboured breathing, convulsions, coma, and death. In favourable cases the sufferer may sometimes be restored to life, *even if not discovered for some hours*. The treatment should be as follows:—

(1) The doors and windows should be thrown wide open, and the escape of gas arrested, or the patient carried into another room. (2) Artificial respiration should be at once commenced, and kept up without intermission for some hours. (3) Strong ammonia should be applied from time to time to the nostrils, the legs should be rubbed, and mustard should be used to the calves and over the region of the heart. (4) A pint of hot strong coffee should be injected at the bowel. (5) Alternate douches of hot and cold water, poured from a height, should be applied to the head. Bleeding may be necessary, and the inhalation of oxygen gas often proves useful. It is hardly necessary to say that a medical man should be sent for at once.

Suffocation by Charcoal Fumes.—Suicide by burning charcoal is not often resorted to in this country, but it is common enough in France. Death may occur accidentally from the use of defective and faulty stoves. Some time ago a man was employed to clean the windows of three small rooms in the basement of a house. The first room had a door opening into the court-yard, the others merely communicated with each other, and there was no fireplace in any of them. A brazier of burning charcoal had been placed in the outer room for the purpose of drying it, but it appears that the man shut the outer door and removed the brazier into the innermost room of the three. In two hours he was found lying on the floor of the middle room, quite dead. A somewhat similar case occurred in one of our prisons. A charcoal brazier was left for only a short time in a cell, and was then removed. The prisoners were then sent in there to sleep, and shortly afterwards two of them were found dead.

Sometimes poisoning from charcoal fumes occurs when the charcoal has not been burnt in the room at all, the vapour having made its way down the chimney, or along a flue from some other room in which the stove is situated.

It is a curious circumstance that in these cases of suffocation by burning charcoal, little or no effort appears to be made by the victim to escape. It would appear that the action of the vapour is very insidious, and that one of its first effects is to numb

the senses and produce complete prostration of strength. The treatment is as follows :—

(1) Plenty of fresh air. (2) Artificial respiration according to the method already described. (3) The injection of a pint of hot coffee into the bowel. (4) The application of ammonia, or strong smelling-salts, to the nostrils.

Suffocation from Lime-Kilns, &c.—Many people have met their deaths from incautiously sleeping, during a winter's night, over a lime-kiln, or brick-kiln, or cement-kiln. In the process of manufacturing these products, various gases are given off which are of a most deadly nature. The sufferer is, unfortunately, as a rule not discovered until it is too late to do much, but efforts should be made in every case to resuscitate him. Fresh air, artificial respiration, the application of smelling-salts to the nostrils, mustard over the heart, and friction to the legs, are the methods on which most reliance is to be placed.

Sewer-Gas.—Death from the inhalation of sewer-gas and cesspool emanations is far from uncommon. Fatal cases have occurred from the entrance of sewer-gas into bedrooms, due to defective drains; and workmen engaged in cleaning out cesspools are not infrequent sufferers. Cesspools, privies, and sewers, before being cleared out, should be stirred up, to permit the escape of the contained gas, and should then be thoroughly exposed to the air, carbolic acid being used freely. The effects are in all such cases very decided. If the poisonous gas is concentrated, death may be immediate. When sewer-gas is diluted, as in the case of badly drained houses, the symptoms are less severe, consisting chiefly of nausea, diarrhoea, loss of appetite, headache, and incapacity for work. The treatment in severe cases consists in removing the patient into the open air, the application of ammonia to the nostrils, the administration of stimulants in small quantities, and the injection of hot strong coffee into the bowel. In less severe cases the only thing is to get out of the house, and to have the drains inspected by one of the sanitary associations. (See page 86, Vol. I.)

Gunpowder Explosions usually produce such serious injuries that they are quite unsuitable for domestic treatment. All that can be usually done is to cover up scorched or burnt surfaces from the air with cotton-wool, or flour, or soft bandages dipped in cold water, do anything possible to stop hæmorrhage from wounds, and carry the patient to the nearest surgeon, or still better, to a hospital if anywhere at hand. It may be as well to mention, in connection with this subject, that a gun loaded with wadding, or even with gunpowder alone, may cause death. The

lighter the missile, the shorter the distance to which it is carried. Some years ago a man sitting in the gallery of a theatre had his hand carried away by a piece of greased newspaper discharged from a small cannon on the stage; and fatal accidents have frequently occurred from the discharge of wadding from cannon at reviews. At a gunpowder explosion which took place some years ago at Hounslow, death seems to have resulted from suffocation rather than from any direct injury.

Injury from Lightning.—Death from lightning, although by no means common in this country, occurs with sufficient frequency to merit a few words of description. From the Registrar-General's Report it appears that 103 deaths from this cause were registered in five years, and 242 deaths in fourteen years. In the majority of cases death either takes place immediately, or the individual recovers. A person, however, may linger, and die from the effects of severe lacerations and burns indirectly produced. The effects differ only in degree from those caused by static electricity generated artificially. The immediate cause of death is shock to the brain and nervous system generally. The electricity in its passage through the body may produce a number of mechanical effects. Wounds similar to those caused by a blunt instrument mark the points of entrance and exit, and bones are fractured or displaced. Lightning is attracted by any metallic substance worn on the body. Watch-chains are broken or fused, and watches have been found smashed into fragments. The clothing is often burnt or charred; and boots have been burst open and thrown to a distance, the nails being driven out of them. In one case the whole of the hair of the head, and the nails of both hands, came off as the result of lightning-stroke.

The treatment of these cases consists in rousing the patient, applying ammonia to the nostrils, and, if necessary, maintaining artificial respiration. The cold douche to the head, or continuous pouring of cold water upon it, has often been efficacious, and is most useful, and this may be followed by friction to the limbs, and the judicious administration of stimulants.

Electric Shock.—Death from electricity generated artificially is not common, although several cases have been recorded; and with the more general employment of this agent for domestic purposes it may be fairly anticipated that the number will increase, rather than diminish. If judicial executions by electricity should ever supersede the older methods, increased facility will be afforded for studying its effects, and formulating a plan of treatment likely to prove efficacious. In the present

state of our knowledge, all that can be said is that the hints for treatment given in the paragraph on "Injury from Lightning" may prove useful.

Death from Cold.—Excessive cold alone may cause death, but in the majority of cases other factors are at work; and poverty and destitution contribute their share in producing the result. A moderate degree of cold, not too prolonged, has a tonic and bracing, rather than a depressing, effect. When, however, the cold is very severe, and the animal heat is not maintained by warm clothing, exercise, and good food, the skin becomes pale, the muscles contract with difficulty, sensibility is lost, and a degree of stupor, amounting almost to torpor, ensues. It was observed during the retreat of the French from Moscow that the men most severely affected by the cold reeled about as if intoxicated, and finally sank into a lethargic condition from which it was impossible to rouse them. Cases are recorded of children who have been murdered by exposing them to the cold night-air, or by immersing them in a bath of ice-cold water.

The methods of treatment to be adopted in cases of illness from exposure to cold are based on common-sense principles. The patient should be roused, and, if possible, made to walk. He should be taken into the house, but must not be placed in a warm room or near a fire. His boots and clothing should be removed, and he should be wrapped in blankets; the extremities being gently chafed with the warm hand. A little soup should be given, but not much at a time, and as a rule this will be found preferable to administering spirits and water.

The treatment of mere frost-bites belongs rather to the department of "Household Surgery."

Starvation.—Cases of actual starvation are fortunately rare, or occur under the most exceptional circumstances. Sometimes, however, miners are shut down in coal-pits, and left without food for many days. A healthy man, aged 65, was confined in this way for twenty-three days. When found, he was conscious and recognised his deliverers, but he was so weak that he could hardly raise his hand to his mouth, and so terribly emaciated as to excite the surprise of his fellow-workmen by the wonderful lightness of his body. He stated that for the first day or two hunger was his most urgent symptom; but this then passed off, and he began to suffer from thirst, which he allayed by drinking a little foul water that he was fortunate enough to find. After ten days he became so weak that he was unable to move. He obtained some sleep, but never quite lost consciousness. His bowels acted only

once, but he passed urine freely. Every effort was made to restore him, but he died on the third day. It is probable that had he been a younger man, and if modern methods of treatment could have been adopted, his life might have been saved. In the Irish Famine of 1847 many terrible cases of starvation occurred, but in no instance was there delirium or mania, which is described as a symptom of protracted abstinence in the case of shipwrecked sailors. There have been many cases of "fasting girls" who, for the sake of a little temporary notoriety, have deluded ignorant people into believing that they could sustain life without food. It is hardly necessary to say that these people are, without exception, impostors.

There can be no doubt that when water is supplied in sufficient quantity, and the heat of the body is kept up, life can be maintained for a long time without food. Dr. Tanner is said to have successfully accomplished a forty days' fast, and he has had many imitators. The experimenter usually pretends that he possesses the secret of some wonderful remedy which will enable him to dispense with food—particulars of which he will impart for so many thousand pounds. The exhibition is usually a mere trick, and it is now so common as to attract but little attention.

In cases of real starvation, every effort should be made to save the unfortunate sufferer. He should be wrapped up in blankets, and should be given small quantities of strong soup or beef-tea to begin with. This should be followed by a little milk and brandy, also administered sparingly. Should there be difficulty in swallowing, the beef-tea may be injected into the bowel, not more than a couple of ounces—say, four table-spoonfuls—being employed at a time. Gradually the quantity should be increased, till he is able to take solid food. Massage to the limbs is useful in improving the circulation.

Snake-Bites are fortunately rarely fatal in England; but in India, according to Sir Joseph Fayrer, the mortality from this cause is at least 20,000 a year. In Great Britain and the greater part of Europe the only poisonous snake is the adder, a variety of viper. In India the most destructive species are the cobra, krait, eehis, and daboia. The activity of the venom differs in character and intensity in different genera and species, and it differs in the same individual snake under varying conditions of temperature and climate. The poison is sometimes absorbed by a mucous membrane, so that to suck a wound is not altogether unattended with danger, even when there is no wound or abrasion. Showmen are sometimes killed in the course of the performances from the bite of venomous snakes. A

remarkable case occurred, now many years ago, at University College Hospital, from the bite of a cobra di capello. The patient was a keeper at the Zoological Gardens, and was bitten on the bridge of the nose. When brought to the hospital half an hour after the infliction of the injury, he was apparently dying, being unable to speak, swallow, or support himself; the pupils were dilated, the face was livid, and the heart's action was very feeble. He died in about an hour, in spite of the efforts which were made to arrest the progress of the poison. It was said that he was intoxicated when bitten, and was playing with the snake, and allowing it to twine round his neck.

The symptoms in most cases are those of intense shock to the system. The limb or part bitten is paralysed; there is intense pain, accompanied by swelling and bruising. Depression, fainting, nausea, cold sweats, exhaustion, lethargy, and loss of consciousness, are common accompaniments. General paralysis follows, the legs being first affected, then the rest of the body, including the tongue and the muscles employed in swallowing. There may be convulsions before death ensues.

Dr. Murrell recommends the following mode of treatment:—(1) A ligature, a pocket-handkerchief, or a piece of rope (if nothing better is at hand) should be tied tightly round the limb between the wound and the heart. (2) A cut should be made with a sharp knife through the skin, so as to expose the tissues where altered in colour, and they should be dissected out thoroughly; they may be cauterised with a red-hot iron or live coal, or by the application of nitric acid or Condyl's Fluid. If no better means are available, as when out shooting, gunpowder should be exploded on the part. (3) Brandy, whisky, or champagne should be administered freely—three or four pints of whisky or brandy may be given in a bad case without much fear of making the patient intoxicated. (4) Artificial respiration should be maintained for some hours.

De Lacerda's treatment consists in injecting under the skin in the neighbourhood of the wound, with a hypodermic syringe, a solution of twenty or thirty drops of Condyl's Fluid.

When the ligature applied above the wound is removed, it should be done very gradually, so as to admit only a small quantity of the poison into the circulation at a time. It should first be loosened and then quickly re-applied, and this may be repeated several times at intervals of a quarter of an hour before it is finally taken off.

Bites from Rabid Animals often give rise to hydrophobia; it never arises spontaneously in man, but is the result of inoculation with the poison

of a rabid animal, usually a dog or a cat, but sometimes a fox or a wolf. It has been acquired from a wound received during the dissection of a rabid animal. The poison is not known to be present in any other secretion than the saliva. Hydrophobia may follow when there has been no actual bite, as when a dog suffering from rabies licks a sore place. A healthy dog may communicate the disease by a bite given immediately after fighting with a mad dog, the saliva hanging to its jaws communicating the disease. In one case it resulted from the teeth being employed to loosen a knot in a rope which had been used to secure a mad dog. When the bite is given through the clothes, the poison is often wiped off the teeth, and no harm results. The first evidence of anything wrong generally consists of an inability to sleep, mental disturbance, and some discomfort about the throat, with difficulty in swallowing, especially liquids. After a time—often in a few hours—the spasm excited by attempting to drink is greatly increased, so that the mere sight of water or the sound of it dropping will bring on a paroxysm. The duration of the disease is from one to four days, but it may last eight days; it usually ends fatally, but some cases have recovered.

When a person has been bitten by a dog, whether known to be mad or not, a pocket-handkerchief or piece of tape should be tied tightly round the wound between it and the heart, so as to arrest the circulation. The part should be sucked by the patient himself, the mouth being carefully rinsed out each time with vinegar and water. The wounds should then be cauterised with nitrate of silver, the stick being inserted into the wounds themselves. If this cannot be done at once, strong nitric acid, or carbolic acid, or a piece of wire made red-hot, will prove more effectual. The services of a surgeon should be obtained as soon as possible. There can be no doubt that Pasteur's treatment is effective in most cases, and a journey to Paris is the safest plan.

Insect-Bites.—The bite of the common flea is disagreeable and irritating, but rarely gives rise to serious symptoms. The itching can generally be subdued, as may that arising from the bites of bed-bugs, by the simple application of ammonia or sal-volatile, or even some soap lather, or by rubbing wetted soap upon the part. How to get rid of such pests belongs to another department.

The mosquito may be kept at a distance by smearing the hands and face, previously to retiring to rest, with oil of pennyroyal, to which these animals have apparently a very great aversion. Gnats can be kept off by the same means, or by the use of a weak solution of carbolic acid. Bites are treated as above.

GOVERNESSES AND LADY-HELPS.

THE domestic helpers of the household are taken, for the most part, from the working classes of the community. There are, however, two assistants not yet named who are supposed to belong to a higher and a better-educated class. These are governesses and lady-helps. We must speak of them, with regard to their position and duties, separately.

Governesses are at the present time in a transition state. Not many years ago ordinary governesses were rather looked down upon by householders; excepting when well connected and very highly gifted, so that they could command their own terms, they were regarded merely as very superior servants, who were to be treated with condescending kindness—having no claim whatever to any sort of equality with their employers, to authority over their pupils, or to handsome remuneration for their services, so that it was a subject of common remark that cooks were frequently paid more than governesses. While fathers and mothers regarded governesses thus, the servants of the household, on the other hand, looked upon them with disrespect and jealousy.

The consequence of all this was that the life of a governess was too often an unhappy one, and, this fact being generally acknowledged, to be a governess became a sort of refuge for the destitute. Only those who could do nothing else would undertake to fulfil the duties of a governess, and hundreds of incompetent young women swelled the ranks of teachers, competing with one another for situations in which little money was to be earned and less comfort was to be enjoyed.

As might have been expected, work which was thus badly paid, and which was undertaken by incompetent persons, was badly done. The education bestowed on the young by governesses who had not been properly trained, and who were never asked to give any guarantee of being qualified to fill their posts, was of a very inferior order, and soon it was discovered that children educated by governesses were the worst-educated children of the community, and were quite unable to take their place by the side of children educated at High Schools and Grammar Schools, where the teachers were most carefully chosen from students who held a distinguished place in the examination lists, and who possessed those sign-manuals of efficiency, certificates and degrees. Well-to-do fathers and mothers who had a prejudice in favour of private teaching, found that the private teaching was not to be compared with the teaching to be obtained at public schools; and that, if they wanted their children to hold their own in the battle of life, they must engage instructors trained and

competent. Such governesses, of course, would expect to be well paid, and to be treated with respect; to have arrangements made for their comfort; to have a settled time for holiday and recreation; and to be considered important members of the household.

Thus it has come to pass that governesses are now divided into two distinct classes. The first, who may be described as high-class governesses, are educated and trained for their work, possess guarantees of capacity in the shape of degrees or certificates of merit, and receive adequate salaries. When engaged in private teaching, they usually have their own apartments, and live a life quite apart from the family to which they are attached. Their meals, or some of their meals at any rate, are, it is true, taken in the schoolroom with their pupils, and kindly employers are accustomed from time to time to invite them to join the family dinner-table, or request them to be present in the drawing-room when company is there. Yet it is understood on both sides that the acceptance and refusal of such invitations are optional with the governess, and that she is at liberty either to join the family gatherings or keep her own rooms, if she prefer to do so. For a high-class governess, also, the hours to be devoted to lessons and the hours of attendance on her pupils are strictly defined; and the more exactly all limitations are laid down, the more likely it is that pleasant relations between employer and employed will be maintained.

The regulations laid down, and the routine to be followed by a governess of this description, vary with the needs and habits of the family. The chief point to be observed with regard to them is that they must be based on respect for the governess and appreciation of her work, this work being strictly educational. No domestic work of any kind is expected from a high-class governess, and the servants of the household are instructed to supply her needs, and to treat her at all times with the courtesy and deference which they would accord to the various members of the family. Her leisure, too, is to be scrupulously respected; and "out of school," and when not engaged in the duties which she has undertaken to perform, she is as independent as is the master of the house himself. More than this, sufficient authority is given her over her pupils in educational matters to enable her to obtain satisfactory educational results. When father or mother feels at liberty to interfere with the order of lessons when so inclined, it is impossible for the teacher to impart the information, or to give the intellectual training, without which young people grow up in

hopeless ignorance. In all cases a private teacher is at a disadvantage when compared with a public-school teacher, because in private tuition there is no emulation to make the pupils eager to work. Unless this want can be supplied by strict supervision and close personal attention, the ability of the teacher will be wasted. The education given by a high-class governess is judged by results, as entirely as is the education given by a Board School teacher; therefore it is necessary that the conditions under which teacher and pupil work together shall be as favourable in the one case as in the other.

Sometimes it is the rule for a high-class governess to accompany her pupils in their daily walk, and to take charge of them when they are going through their physical exercises. A detail of this kind is, however, always looked upon as a subject for special arrangement.

Ordinary governesses, amongst whom are to be included the large class of nursery governesses, are very differently placed to the high-class governesses. They do not command such high salaries as the latter, and they are less able to make their own terms with employers. They are less independent also, though their position varies in different families, and is determined largely by their acquirements and by the estimation in which they are held by the parents of their pupils. Their duties are not always limited to educational training, for many resident governesses undertake, in addition to lessons, the supervision of the children of the household out of school, take them out for walks, and look after them generally. Nursery governesses frequently take upon themselves the duties of washing and dressing the children, and repairing their clothes, and in some cases they will keep the nursery in order also. Thus it will be seen that they occupy a position analogous to that of an upper nurse. It has to be confessed that the term "governess" is a very general and expansive one, and that it includes helpers of many grades. In households where there are several young children, the governess is very often the reliable friend of the family; carrying out in nursery and schoolroom the ideas which the mistress and mother inculcates in other parts of the house. There are governesses who remain with the same family for years, who become attached to the children, are a part of the life of the household, and take their share of the joys, sorrows, and anxieties that belong to it. It would, however, be safe to conclude that where the governess occupied this position, the mistress of the household was a reasonable and good woman. Indeed, the credit of such a success would belong quite as much to the mistress as to the governess.

The position of an ordinary or nursery governess

is undoubtedly felt to be invidious, and is regarded with distaste by capable female teachers. The explanation of this is, that few mothers are reasonable about the treatment of their own children. The teacher at a public school trains and disciplines the children apart from the mother, and the more efficient the teacher, the less likely is she to brook interference with her methods and rules. The certificated teacher also follows an established plan of tuition, and trusts to results. But the ordinary or nursery governess works under the eye of the mother; and frequently, as a consequence, she has a very bad time, simply because the mother is unreasonable. When, however, the mother is reasonable, her sympathy and aid are of the greatest value.

An ordinary governess is especially to be commiserated when, as is so frequently the case, she assents to the understanding that "in the spare time left from teaching the children, she is to make herself generally useful in the house." Such an arrangement is a most unsatisfactory state of things for the governess. She can have no time for herself, and never even knows what will be the next demand upon her. Sewing is waiting for her as soon as lessons are done, and too often, if a child be ill, all the cares of nursing fall to her share. Not only is all this hard for her, but it prevents any good result from what should be her special work. Teaching makes demands upon attention, and nerves, and temper; and if the teacher is constantly distracted by all sorts of calls to other duties, it is impossible she can succeed in a duty where calmness, forethought, and regularity are constantly necessary. It has been well said that no servant would endure what many a governess has to put up with, and the children themselves are grievous sufferers from such injustice.

Where, however, the services of a nursery governess are secured while the children are too young to need actual teaching, it must not be understood that it is at all a hardship for the governess to assist the mother as nurse and needle-woman. A light employment like sewing would, indeed, be welcomed by many ladies, as a pleasant change from the monotony of looking after children. The difficulty, therefore, of the situation lies in drawing a just line, to suit individual circumstances, between what is reasonable and what is unreasonable. It is here that the character of the mistress makes itself felt. An educated, cultivated mistress, who realises that teaching children properly is a difficult and most nerve-trying task, which cannot possibly be taken up and laid down like a seam, would never think of letting a governess attempt work which was beyond her powers; and would do all that in her lay to vary the work of the governess, and to

make it interesting; would take pains to secure leisure and a sufficiency of holiday for the governess; and would encourage her to use her liberty as she liked. But, on the other hand, this mistress would know that the duties of a governess are not fulfilled when lesson-books are closed. They consist also in the wise government of the nursery; the ability to instil sound moral principles into the minds of the children; and the possession of sound common-sense, which can be appealed to whenever difference of opinion prevails, or disputed rights are in question. Qualities of this kind come into force out of school-hours as well as during school-time, and a little needlework does not interfere in the least with their exercise. Therefore it cannot be too strongly insisted upon, that the position and duties of the governess will be regulated by the character and the requirements of her employers. The situation of a governess is a very responsible one, and the happiness and comfort of the family, and still more the welfare of the children, depend upon its being well and worthily filled. Nevertheless, more than any situation which can be named, it varies with the ideas of the head of the household; and it is she who practically decides what the governess shall do, and what her position shall be.

Mr. Alfred Pollard, in a recent article, sums up the results of an exhaustive inquiry into the condition of governesses of the present day, and the points as to which their relations with employers are most frequently strained, in order that he may suggest some modification of the present governess system, "with a view to lessening the almost morbid horror with which many educated women now regard the prospect of having to earn their bread as teachers in the houses of strangers." As a result of this inquiry, he states that the pecuniary position of the modern governess, while it still falls very far short of what it ought to be, has during the last half-century made steady progress, and that the tendency of public opinion sets in the right direction. Her social position is said to have improved in a similar measure; and this is not considered surprising, when it is remembered that adequate pay and adequate respect are very closely allied. It is in households where the employers have no notion of paying the governess properly, that the latter is liable to be classed with "the other servants," and to be unworthily treated.

The suggestions for improvement of the position of governesses made by the writer referred to are very reasonable, and well worth the consideration of householders about to engage governesses. The first is that all governesses should be registered. Says Mr. Pollard, "That governesses may be more respected, they must be better qualified; that they

may be better qualified, they must be better paid; that they may be both, they must be better chosen; and that they may be better chosen, there must be some one to choose them. The education of the poor is not now allowed to be entrusted to incompetent or untrained persons; and in the thirst for equality, which is the great feature of the day, it does not seem rash to predict that a similar supervision must soon be exercised over the teachers to whose care is entrusted the education of the well-to-do. That every teacher should be registered, and that instruction received from an unregistered person should not be recognised as a compliance with the provisions of the Elementary Education Act, is the first and most important suggestion."

Another suggestion made is that governesses should be allowed more liberty. It does seem unreasonable that a person supposed to be responsible for the children of the household, should in many houses be expected to inform the mistress if she leaves the house on the most trifling errand. At all events, there can be no doubt whatever that any person fit to have the care of children at all, should be treated with far more respect than many mothers show them.

We fear it cannot be denied that many women do not get on well with women in their employ. At all events, numbers who would feel aggrieved if not considered ladies, use habitually a tone towards their subordinates which grates on the ears of any gentleman, and which he would never use towards those (of his own sex) under him. How many mistresses, in cases where the governess is supposed to be one of the family, would place no jealous check upon a friendship between the governess and one of their visiting circle? Yet no one who really *respected* a lady who was honourably earning her bread by one of the noblest of professions, would presume to do so, or would question the right of her governess to have *some* liberty and responsibility of her own, if a special sitting-room could not always be at her disposal.

These suggestions will perhaps be pronounced unreasonable by householders who have to engage governesses. The very fact, however, that they have been advanced by a writer who has specially studied the subject of the position of governesses, is a sign that public opinion is now on the side of the latter. Mr. Pollard's last suggestion, however, refers to a business detail:—"Whenever a governess is engaged for a long time or a short one, there should always be a formal written agreement, stating explicitly the salary, minimum amount of holidays, and, above all, the length of notice requisite for the termination of the engagement from either side. At present verbal arrangements, or at most a discursive letter, are the

only preliminaries to the governess commencing residence; and it is incredible how often and how light-heartedly employers overlook the necessity of ample notice of the termination of an engagement, and for some slight convenience of their own turn the governess adrift before she has had a chance of obtaining other work."

This suggestion, at least, ought to commend itself to all. Neglect of definite arrangements of this kind has too often led to misery and ill-feeling; and if these evils can be prevented through a little care and forethought, both governesses and their employers would be benefited. It is a fear of the oppression and injustice which attend the want of these arrangements, which causes the position of governess to be so much disliked by high-class women; and until this oppression and injustice can be done away with, there is little hope that the governess system will be permanently improved.

Lady-Helps.—Householders have now for many years been acquainted with the term "lady-help," and yet it can scarcely be said that the reality has passed from the theoretical into the actual. The idea of employing gentlewomen as domestic servants arose from the discovery that if a *servant* was wanted, there was great difficulty in finding one; whereas if it became known that a situation was vacant in which the services of a *gentlewoman* were required, the applications made by persons anxious to obtain the same were very numerous, and could be counted in some cases by hundreds. It did not signify that the servant was to be comfortably placed in a situation where the duties were light, the wages good, and the privileges many; and that the lady was wanted to work hard for small pay, and with little time for rest and recreation; still there were crowds of starving lady applicants, and very few servants. What made the situation all the more extraordinary was, that many of these gentlewomen were quite unfit for anything but domestic service. They were unable to teach, because they had not been trained to be teachers, and they did not possess the certificates or degrees which are required in these days as a guarantee of efficiency in teaching; they had not been taught to earn their living in any of the directions now open to women, and yet many of them in their own homes had been accustomed to household work. They were the daughters of professional and business men who had been able to make and keep a comfortable home for their families while they were able to work, but had been unable to save or make provision for their children's future. The consequence was, that when sickness laid these fathers low, or when death removed them altogether, the daughters were left in poverty, with no available

means of subsistence, and with nothing to fall back upon excepting their domestic skill, their knowledge of cooking, cleaning, ironing, and sewing. Yet this skill they felt that they could not use, because if they became domestic servants they would be degraded, they would lose caste, and their social position would be lowered.

At this stage of the proceedings a benevolent and wealthy lady, named Mrs. Crawshay, of Cyfarthfa Castle, Merthyr Tydvil, determined to try if she could not cure the evil, and help the unfortunate gentlewomen to earn their own bread, by removing the barriers which prevented their assisting the harassed and overworked housekeepers who were so sorely in need of servants. Mrs. Crawshay appears to have been of the opinion that it was not work to which the "gentlewoman" objected; it was the annoying, and sometimes ignoble surroundings of domestic service, the loss of refinement and leisure, and the association with rough companions; and that if domestic service could be performed with dignity, and be made honourable, it would become popular. In her own home, therefore, Mrs. Crawshay determined to make an experiment. She engaged a number of gentlewomen as domestic servants. Her cook, lady's-maid, kitchen-maid, dairy-maid, and upper house-maid were all "ladies." They occupied the rooms which had been formerly used by these domestics, and which had been made comfortable for them; they waited on themselves far more than ordinary upper servants do, and they did the work which belonged to the situation in a way that left nothing to be desired. Mrs. Crawshay testified that, "owing to their superior intelligence, lady-helps 'got through' work much faster than ordinary servants; and that, owing to their delicacy and refinement, they made none of the 'dirt' which servants are so famed for producing. There is much less wear and tear of carpets and floor-cloths by the feet of young ladies, as compared with those of ordinary house-maids;" while "in cases of emergency they worked with the greatest industry until all was finished."

In return for this faithful service, and by way of doing her part towards solving the problem which was before her, Mrs. Crawshay made special arrangements for the comfort and well-being of her ladies. She paid them handsomely, but this was a small part of the generosity which she accorded to them. She did not invite them to dine with the family, it is true; for she said, "To treat five strangers as if of the family would be impossible; if they all dined with us, there would be no such thing as privacy;" but she treated them with every consideration, set apart a sitting-room for their special use (in which they could sit and take their meals), surrounded them with refining influences, and supplied them with the

means for recreation. She invited them to sit with her from time to time, and formed the habit of taking them with her when she went driving, and she associated with them on equal terms. More than this; in order to show that there was nothing degrading in work, she took a personal share in the work of the house, and occasionally performed small household tasks with her own hands. In short, she did all that a kindly and charitable gentlewoman could, to bring happiness and independence to her less fortunate sisters.

In her opinion, and from her own point of view, Mrs. Crawshay's scheme was a great success. It was, however, judged very differently in different quarters. Householders who sympathised with Mrs. Crawshay's aims, said that she had cleared away a great social difficulty, and they anticipated the best results from her efforts. Others, however, made nothing but fun of her methods. They said that if gentlewomen would work only for those who considered and humoured them on every occasion, gentlewomen would have to remain idle; and that their whims were more trouble than their labour was worth. More than this; the less skilled and more ignorant of servants, seeing that lady-helps were treated with special consideration, imagined that the only qualification for this consideration was the title of the helper to whom it was given. They therefore claimed to belong to the privileged class, and without any of the refinement and good manners which ought to have distinguished them, wished to be treated as the equals of the mistress, when they were really inferior to the servants. Soon it came to pass that the more worthless and the more incompetent a domestic servant in want of a situation, the more likely she was to describe herself as a "lady-help." Thus the employment of lady-helps fell into disrepute.

The result of the experiment has, however, been that in a modified form Mrs. Crawshay's scheme has proved very advantageous to the community. As originally designed, it was undoubtedly somewhat unpractical. A wealthy lady like the mistress of Cyfarthfa Castle, with abundance of leisure and means to carry out her ideas, could indeed make domestic work most attractive; gentlewomen could accept service with her and "lose none of their refinement, their accomplishments, their knowledge of current literature." Yet ordinary householders who were less fortunately placed could not possibly imitate her example. With only a limited number of apartments at their disposal, they could not spare a room for the special use of the lady-helps, nor could they under any circumstances undertake to provide amusement and refined surroundings for their assistants. When, therefore, they heard of the elaborate arrangements which wealthy ladies made

for their lady-helps, they simply refused to entertain the idea of indulging in such luxuries. But gradually more reasonable methods were adopted. Gentlewomen had common sense, and mistresses were kindly and thoughtful, and so it was found possible for the two to come together without the entire disturbance of the household routine. The consequence has been that in numbers of homes at the present time "gentlewomen" have found their place, and fill it with credit and honour. These lady-helps not only render service to the mistress, but they act as her friend and her right hand. They seldom take a share of actual drudgery; the scrubbing and rough work of the establishment is accomplished by some one more accustomed to these details than they, but they share the labours of the housekeeper, and take their part of the burden of domestic management. They make the interests of the household their own, and identify themselves with the family with whom their lot is cast, as servants too often refuse to do. They are patient, cheerful, and intelligently considerate, and so they make themselves most valuable and helpful to their employers.

The domestic positions for which lady-helps have been found from experience to be best suited are those of head nurse and lady's-maid. In both these situations the assistant comes into close personal contact with the mistress, and has the opportunity of making her individuality felt. To the first-named of these two positions lady-helps are particularly adapted. There are many mothers who find it the greatest comfort to have about their children educated persons who will, by example as well as by precept, do what they can to make the children gentle and courteous. Servants may be ever so faithful, but if they speak ungrammatically or behave vulgarly, the children unconsciously imitate them, and become like them. It is only through daily intercourse with persons of refinement that children can be trained to be refined. A lady-help is supposed to be educated and refined as a simple consequence of her birth and breeding, and therefore good manners and habits are natural to her, which would be assumed with difficulty by a person differently brought up. When, in addition to education and refinement, the would-be lady-help possesses the qualifications of industry, cheerfulness, good temper, and capacity and conscientiousness, it would be impossible for a mother to do better for her children than by placing the management of her nursery in the hands of such an one.

An advantage associated with the employment of a lady-help as nurse in small households, is found in the fact that it disposes easily of the difficulties which are supposed to belong to the position. Few gentlewomen would be willing to enter a house and

be treated exactly like a servant; they would not be happy to take their meals in the kitchen and spend their leisure with people of ideas and habits different from their own. Yet there are few housekeepers who have a sufficient number of rooms in the house to enable them to set one apart for this purpose. On the other hand, it is a great interference with domestic privacy to have a stranger constantly present with the family at all times and seasons. In circumstances like these the nursery is as a haven of refuge to the lady-help. She can take her meals there with the children without any sacrifice of dignity, and will yet feel no painful consciousness of intrusion. After a time, when her value has been proved, she may come to be regarded as a friend of the family, and her presence will then be no infliction; and until this happy state of things arrives she will not want a resting-place so long as she can retire to the nursery.

The remuneration which ought to be given to a

lady-help is a subject concerning which there is much variety of opinion. Some housekeepers appear to think that a lady-help can be engaged for a mere trifle; that she would never undertake to fill the position unless she were needy, and, being needy, she cannot afford to be independent. Thus we sometimes see advertisements in which it is stated that "a lady-help is wanted in a household where a comfortable home will be a greater consideration than the amount of remuneration paid." It is generally found that when an inducement of this kind is held out, the comfortable home exists only in the imagination of the advertiser. Lady-helps of the best sort are never a success in households where this mercenary spirit prevails. If treated generously, they usually give generously, and make no difficulty about trifles; but household work that is done intelligently, is done so much better, and at so much less cost, that the intelligence ought to be paid for more liberally than the incompetence.

WARMING THE HOUSE.

How to warm a house and how to ventilate it, though at first sight widely different questions, are in reality very closely connected; and the better the system of heating, the more effectually does it cause and produce ventilation, though the latter subject will have to be dealt with separately. The old method of constructing a house was simply to build the shell, divided into such rooms as were wanted, with a certain number of chimneys and hearths. As wood grew scarcer, and coal by means of the canal and railway systems was carried all over the country, grates were set in the open fireplaces; and as after a time their chief peculiarity seemed to be that of carrying all or most of the heat straight up the chimney, the register grate was invented, which lowered the firegrate, and closed the chimney, with the exception of a door or lid for the escape of the smoke, and was capable of being shut entirely when there was no fire. These grates were wonderful improvements, but they consumed a vast amount of fuel in proportion to the heat given out; and though there are still miles of streets and millions of houses fitted with them, they are surely, if slowly, giving place to different kinds of "slow-combustion" stoves, which not only burn very little coal, but effectually warm the floor of a room, so that cold feet are unknown to its inhabitants, and a gentle heat rises gradually and fills the apartment with a pleasant, wholesome kind of warmth.

The Open Fireplace.—As a nation we love

the cheeriness of an open fire, and as we are not really a very thrifty folk, we ignore the fact that it is a wasteful mode of heating. Count Rumford, nearly 100 years ago, was the pioneer of improvement, and of the system of producing the greatest amount of heat from the smallest amount of fuel, and his views may be broadly taken as the basis on which subsequent authorities have worked. It is not only the heat and fuel that have been wasted; but where they are consumed lavishly and on wrong principles, we load our atmosphere and blacken our houses with soot, and produce quantities of cinders, which half the time are wasted, and never need have left the fireplace. The loss to the country in heat and fuel, dirt, and the labour spent in trying to get rid of it, is almost incalculable, even without taking into consideration the mischief done to health, as well as vegetation, by the smoke that hangs like a pall over our towns and cities.

The open fireplace creates circulation of air by drawing a perpetual stream of the air it has warmed up the chimney, and, to supply this demand, drawing also a continual supply from any openings there may be from the room to the air beyond. The means used to heat the room, actually produce draughts that keep it cool, and are frequently unpleasant, and even dangerous. The way to obviate this is to renew the supply by means of air that is *warmed* instead of being cold, and unless this outer air can be brought in at a temperature of from 54° to 60°, one of the chief advantages of the open fire is lost. The open

fireplace warms the room by first warming the sides and back, and all the parts near the grate; then, gradually, warmth is imparted to the walls, floors, ceiling, and furniture of the apartment, all of which in turn communicate more or less warmth to the air. In many modern grates, however, the idea is to convey heated air from some part in direct contact with the grate, into the room.

Count Rumford pointed out long ago that the sides of a firegrate should be splayed (see Fig. 1),

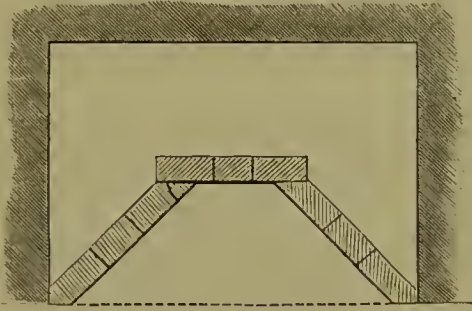


Fig. 1.—RUMFORD'S PRINCIPLE.

thus demanding less fuel to fill the grate, and giving a much better and more "spreading" radiation into the room. Recent fashionable grates and fire-baskets have gone back to the old cubic form; but this is a great waste. Rumford's principle remains as incontrovertible as ever; and sooner or later, the making of grates square, because square is old-fashioned, must surely die out again.

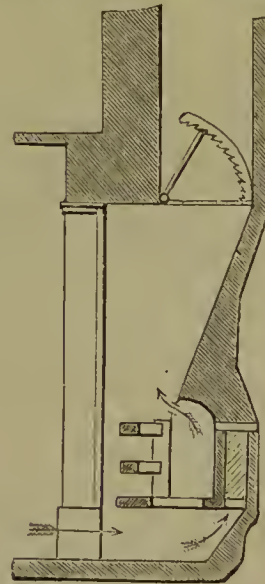
The coal ordinarily used in houses is bituminous, and therefore makers devote their attention principally to the manufacture of open grates constructed for the consumption of that particular kind of fuel. Messrs. Rosser and Russell showed one at a Smoke Abatement Exhibition, which was made entirely of fire-brick, with the exception of a small part forming the front portion of the floor. The back was deeply fluted, and the draught passed up in these flutes, and was reversed downwards behind the back of the grate, from whence it went up the chimney. Fresh air was heated inside the hollow fire-brick sides of the grate, and was thence delivered into the room.

A simple kind of grate, commonly known as the "Manchester" (Shorland's Patent), not only warms the room in which it is set, but conveys the warm air into others. It is an ordinary-looking grate, with fire-brick lining, and a narrow slit through the back, two inches high by a quarter of an inch wide, which admits fresh air into the body of the fire. Fresh air is admitted from below over the gilled back and sides, and rises into a couple of pipes, which deliver warm air into adjacent rooms or passages.

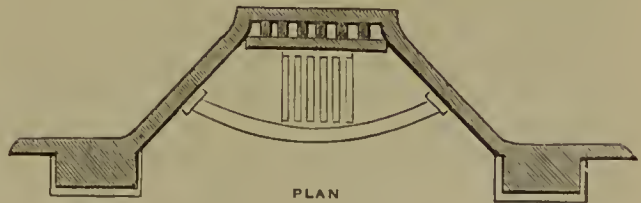
Captain Galton, of the Royal Engineers, some

years ago devised a valuable grate, which was adopted by the War Office for use in barrack-rooms, and is commonly called the Ventilating Fire-place. In order to secure the ordinary amount of warmth in the air of a room, this fireplace requires only one-third the quantity of coal consumed by the ordinary fireplace. In order to diminish the smoke, part of the air which feeds the fire is directed on to the top of the incandescent coal at the back of the grate, after being warmed by contact with the heated fire-brick back. This arrangement for bringing the warmed air in contact with the fire is usually called a "baffle." The fresh outer air is admitted at the back into a hot-air chamber behind the fire, and then carried by a flue adjacent to the chimney into the upper part of the room. This conduces to an equable temperature, and provides plenty of air quite fresh and warm, but not unduly heated. The use of the "baffle" is to cause the gases of the coal to mix with hot air in the presence of the burning fuel, thus securing the combustion of all.

The simplest form of a baffle is shown in Fig. 2. The sides and back are made of fire-brick with glazed surfaces and splayed. The cradle or basket



SECTION



PLAN

Fig. 2.

for containing the fuel, which stands eight inches back, has a fire-brick slab, with corrugations in it at the back, and it rests against the back wall;

and the grooves produced by the corrugations form tubes through which air comes up at the back of the fire-basket, and is deflected by the top of the recess on to the surface of the fuel. The air, being thus heated by contact with the face and flanges of the fire-brick at the back, meets and unites with the gases given off by the coal, and a bright flame is the result. It is, however, necessary to put a slight check on the combustion of the lower strata of fuel, so the bottom of the fireplace is made of solid fire-clay, all but about one-third in the centre, which is an iron grating (see Fig. 2), through which air penetrates to the back of the grate, and keeps the

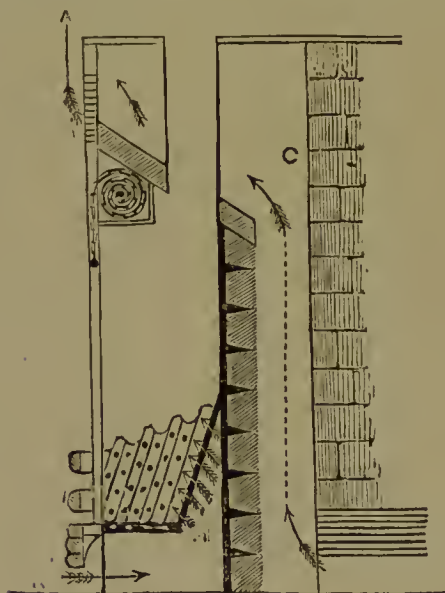


Fig. 3.

fuel burning. This counteracts the ordinary defect of solid-bottomed grates, as the fuel at the back of them seldom attains heat enough to give off its gases at the right temperature.

Even where the importance of admitting fresh air into a room supposed to be sufficiently warmed by a fireplace is recognised, it is difficult to bring the principle into play in a house already built and established, or in one where the fireplace is not in an outside wall.

What is called Griffin's Grate, however, meets the difficulty in many cases, and it is illustrated by Figs. 3 and 4. The sides, floor, and back of the fireplace are of iron, perforated in such a manner that air enters the fireplace on all sides. The back and flanks of the grate are made of cast-iron, and have shallow gills cast on the back surfaces, filled up to the thickness of an inch with fire-clay. External air is admitted into the chamber *c* behind the grate, warmed, and has its outlet into the upper part of the room. This grate can be fixed with very little

expense, and it maintains an even temperature in the apartment that is so fortunate as to be fitted with it.

Dr. Arnott's grates once had a considerable reputation for economy of fuel, and also for producing very little smoke. They had solid floors, and a chamber which was filled with coal. The fire was lit at the top, and burned gradually downwards; and the bottom of the chamber was moved upwards as the top layer of fuel was gradually consumed. All the gases distilled from the coal passed upwards, and, mixing with the air at the top, created flame. The great fault of the Arnott grates was that they

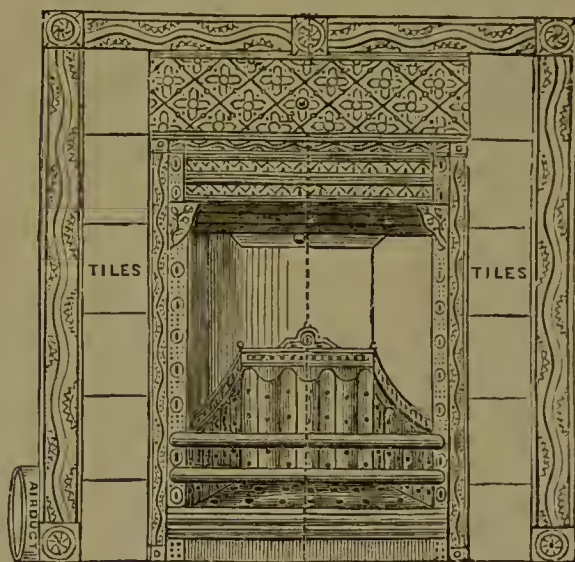


Fig. 4

GRIFFIN'S GRATE.

had no provision for bringing fresh air in to the top of the fire, so that there was not enough flame created to look cheerful.

Messrs. Barnard and Bishop have a grate on the same principle, that produces what they call a "Glow Fire," in which a current of air is brought up from an ash-pit through a slit in the fire-clay under a "baffle," which throws the air on to the top of the fire. This is a very efficient grate in every way, and a tolerable smoke-consumer.

Smoke Consumption.—Most arrangements for consuming smoke depend upon introducing the new fuel at the bottom of the fire, *below* the coals already burning.

Messrs. Brown and Green have a capital grate, supplied by under-feeding, which produces very little smoke. A section of it, as well as a front view, will be seen in Fig. 5. Fresh coal is placed on the curved ledge that projects from the bottom of the grate, and is forced under the already

incandescent coal by means of a taper shovel made for the purpose. This is a very pretty-looking grate, and keeps the hearth clean.

Another class of open grates are the "hopper" grates, so called because the coal is put into a hopper at the back or side and pushed into the fire when wanted.

There is also a cylindrical grate supported on its axis, and filled with fuel; and when this has burnt up the grate is turned over, bringing the fire on the

getting any new or complicated mechanism out of order. The old fireplaces have been known for so many generations, that a sort of heredity governs their use, and many years must yet elapse before ordinary servants grasp the new principles and make intelligent application of them.

A very handy little implement, which to some extent converts any ordinary fireplace into a "coking stove," is a wedge-shaped box-shovel, which is filled with coal, and pushed into the fire under or among

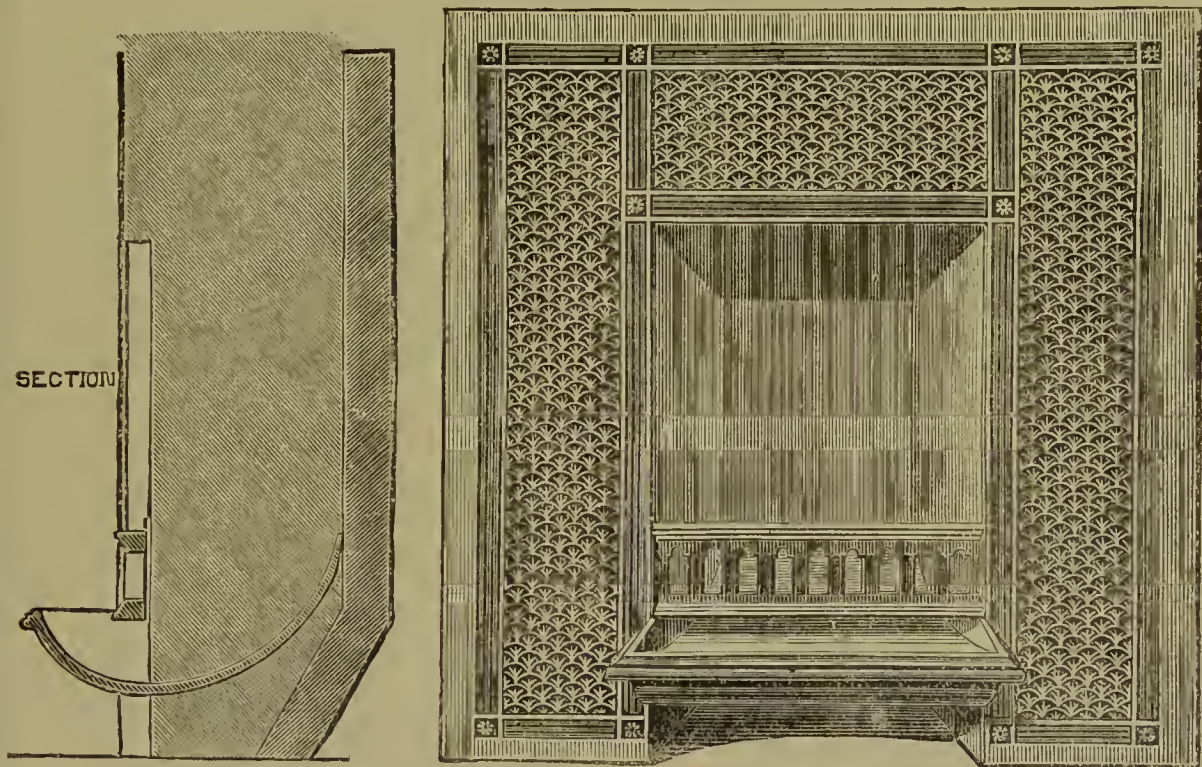


Fig. 5.—BROWN AND GREEN'S SMOKE-CONSUMING GRATE.

top, which burns downward till part of the fuel is consumed, when it is refilled and turned over again.

Another elaborate arrangement is a box moving on a pivot under the bars of the grate. This box may be turned on its pivoted support so as to bring it out in front of the fire; and when it is in this position, a slide covers an opening in the centre of the grate. The box is filled with coal and turned back into its position under the fire, a movement which simultaneously withdraws the slide; and by means of a false bottom in the box, the coal is lifted through the opening in the grate into the fire. There are various other methods of pushing in fresh coal from the backs and sides of grates, but none of them have as yet become general; and a great bar to their common use is the crass stupidity, not only of ordinary servants, but of persons who might know better, and who are positively ingenious in

the live coals. When it is in the desired position, a lever is moved, the box opened, and the fresh coal pushed out, when the shovel can be withdrawn, leaving the coal under the fire.

Another means of more or less consuming the smoke is called the "regenerative system," in which the leading idea is to heat the air needed to maintain the fire, and thus to secure better combustion of the fuel. The unburned carbon that escapes from the fire is met just beyond the grate by streams of highly heated air, and in this hot air it takes fire and burns. Smoke is formed where there is not sufficient fire to enable it to burn; but if the smoke, directly it has left the fire, meets a fresh supply of air, some of it at least will burn. If this fresh air is highly heated, it will burn all the more readily; and if the apparatus is properly designed and constructed, all the smoke will be consumed. Among the new

appliances shown at one of the Smoke Abatement Exhibitions was a grate with hollow bars, open at the front end to the air, and communicating with pipes, opening into the flue, just behind the fireplace. Fresh air is drawn through these hollow bars and highly heated; it then meets the products of combustion, and the unburned gas and smoke take fire and burn with great heat at the ends of the pipes. The same thing is sometimes accomplished by drawing fresh air through sinuous passages at the sides of the fireplace.

Still another principle is to draw *down* the gases from fresh fuel placed in the ordinary way on the top of the grate, through the burning or red-hot part below, and then to pass the fumes into the chimney. From the smoke-abatement point of view, some of these are very valuable. Parker's "Vencedor" grate of this class has an open front, and stands clear of the chimney opening, thus giving off heat from back, top, and sides, as well as front.

All the grates heretofore mentioned are for burning bituminous coal; but for anthracite and coke the Coalbrookdale Company make the pretty "Kyrle" grates, Parker's patent, which have fire-brick linings and floor, and a down draught through an opening at the lower back corner into the flue, as well as a backward draught through an opening at the back, just above the fire, which meets the backward draught ascending from the bottom. Another good grate for burning this kind of fuel is Ingram's "Kaio-Kapuos" grate, made by Clarke, Bunnett, and Co. This has a fire-brick lining and floor, and the gases pass through the back and downwards, and under the floor of the grate to the front, and go from thence under a horizontal partition plate to the back and up the chimney.

Slow-Combustion Grates.—The subject of open grates and fireplaces would be terribly incomplete without mention of the "Country Parson" and other slow-combustion grates. Some time early in 1870 a letter appeared in the *Times* from a "Country Parson," bewailing that, with dear coal and inefficient grates and smoky chimneys, he had no comfort, and scarcely knew what it was to be warm. To him replied "Another Country Parson," the late Rev. Lord S. G. Osborne, better known as S. G. O., who advised him to clear away his grate, and gave directions how, with the aid of the village mason and blacksmith, he might have a cheerful heat-diffusing fire, burning a very small quantity of coal, at a cost of about £1 4s. Mr. Mechi, of Tiptree Hall, then in his seventy-fifth year, also took up his parable, and gave directions for the building of useful grates in labourers' cottages from 12s. each—grates which, when the fire was once well

made up, would burn coal-dust at 12s. a ton. The cardinal principle of all these grates was to check the direct draught through the bottom bars, which wastes the fuel and carries the hot air and smoke so rapidly up the chimney. The "Country Parson's" simple expedient was to cut a piece of sheet-iron to fit the bottom of the grate and lay it over the bars; and this has been done in thousands of grates, to the saving of shiploads of coal.

On these lines valuable and inexpensive stoves were speedily produced. They are fitted with blowers, and the bars or fire-baskets are very near the floor, and extremely shallow from front to back. Many grates combining as many as possible of these principles are simply more or less ornamental fire-baskets, and can be *stood* (not *set*) in an empty tiled fireplace, being as much the tenant's pieces of furniture as his tables and chairs. It is, indeed, a wonder that more new houses are not built with tiled fireplaces, in which tenants who are particular about the style of grate they prefer can stand their own. So much expense is spared, to say nothing of the saving of dirt and annoyance where no bricklayer's work is required, that these stoves will no doubt be ultimately more and more adopted.

What a Fireplace should be.—No one has studied the whole question more closely than Mr. Pridgin Teale, a surgeon in one of our large Midland county infirmaries or hospitals, who read a paper on fireplaces before the Architectural Society of London during the winter of 1886, in which he lays down certain rules. The first of these is that in the construction of grates as little iron should be used as possible—only the grid on which the coal rests, and the bars in front. The second is, "The back and sides of the fireplace should be of brick or fire-brick;" and the reason is because brick retains, stores, and accumulates heat, and radiates it back into the room, and keeps the fuel hot. Iron, on the contrary, lets heat slip through it up the chimney, gives very little back to the room, and *chills the fuel*, making the outer parts of the fuel black. Rule the third says, "The fire-brick back should lean over the fire, not away from it;" and as a sort of corollary to this, "the bottom of the fire or grid should be deep from before backwards, probably not less than 9 inches for a small room, nor less than 11 inches for a large one." This latter is essential, because it affords plenty of room for the burning fuel to be down close to the grid and away from swift air-currents, and it prevents the fire from burning hollow. Other important points are that the slits in the grid should be very narrow, so that cinders may not fall through and be wasted, and that there should be a rim an inch and a half in depth

round the lower insertion of the *vertical* bars, to conceal the ash at the bottom of the fire, and enable the front cinders to burn completely away by protecting them from the cold air. The chamber under the grate should be closed by a shield, or, as Mr. Pridgin Teale calls it, an "economiser," a kind of thing rarely seen until latterly in the South of England, but in ordinary use fifty years ago in and about Birmingham. This stops the draught nearly as much as the sheet-iron bottom, but in a better manner. Many grates made on this principle can be seen in the more modern railway stations. But those who use grates made and set in this way must bear in mind that a greater body of heat is accumulated about the hearth than in ordinary fireplaces. If there is the least doubt whether wooden beams may possibly run under the hearth-stone, then an ash-pan should be added with a double-bottom, the two-inch space between the plates being filled with artificial asbestos, or "slag-wool."

It is calculated that fireplaces thus constructed save at least one-fourth of the coal ordinarily burnt; and every ton of coal saved means so much less time occupied in bringing coal from the cellar to the living-rooms, and in replenishing the fire and sweeping the hearth. It must be remembered that there is no poking of the bottom of the fire to remove the accumulation of dust and cinders that in ordinary grates make the fire burn dead, because it remains red at the bottom, and the combustion of cinders goes on when they are in contact with the bars of the grid, which are kept hot by the "economiser."

Nurses from all parts are unanimous about the virtues of these "economisers" in a sick-room, because they say there is no noise of cinders falling out of the grate, of poking the fire, or shovelling away ashes and dirt from the hearth. A fire will do very well for five or six hours without mending; and when coal is put on, it speedily burns up. This is on account of the small quantity of coal remaining on the grid being red-hot, as well as a large body of heat being stored up in the floor and walls of the chamber under the fire. Then, again, the heat stored up in the fire-brick is slowly given off, even after the fire goes out, and prevents the chilling of the air during the early hours of the morning.

But the efficacy even of the common, old-fashioned grate can be very much increased by the addition of a closed shield and ash-pan; and to a certain extent the slow-combustion principle can be applied to an ordinary grate in the manner above described, by placing a piece of sheet-iron on the grid, and laying the fire so as to light it at the top. But unless lit very early indeed, this does not produce a cheerful blaze early in the day, though about noon, if previously unpoked, there will be a splendid fire.

And though a good plan for the interest of employers, servants never like it at first, on account of the extra trouble in lighting; and considerable firmness is often required to insist upon its adoption. In the end, however, and after fair trial, this method of checking combustion becomes popular with them also, the fire not needing one-quarter the attention afterwards, either in renewal or in "doing up the hearth."

Halls.—So much for different kinds of grates for bed and sitting rooms; and now we must turn our attention to the ways of warming halls, passages, and staircases—a very awkward business in houses where the possibility of those parts requiring to be warmed has been left out of consideration altogether. When the hall, out of which the staircase usually ascends, has outer walls, it is not difficult to build a chimney or carry up an iron flue; but supposing that hall to be in the middle of the house, or to have its only outer wall occupied by the front door and window, something else must be arranged, such as a stove with a descending flue, to carry off the smoke through the floor, and conduct it by a horizontal flue to an already existing chimney, or one specially constructed. If this seems impossible, sometimes a vertical iron flue can be carried straight up through the upper landings to the roof; or resort is had to hot-water coils in connection with the circulating-boiler of the kitchen range, or perhaps from a boiler in the basement, or in connection with the hot-water pipes used for a greenhouse, the stove-hole for both being placed in a central position between them, and means being adopted to regulate the heat according to whichever department requires it the most.

Stoves.—Stoves entirely without flues have often been advertised, but they burn charcoal or some compound of it, and are always dangerous, as well as expensive. A very nice kind of hall-stove is called the Gill Air-Warmer, consisting of a number of cast-iron plates called "gills," which are firmly cemented and bolted together, with an air-space between them. The amount of heating surface is so large that it is impossible for the iron to become over-heated, and the interior is lined with fire-brick. A door and air-regulator are provided, which enable the fire to be closed and to burn slowly all night, or, at all events, for several hours without attention. This stove can be used with a descending flue, and the best fuel for it is a mixture of coal and coke.

Then there is Dr. Arnott's well-known slow-combustion stove, which has been in use for about fifty years. It is a close stove, lined with fire-brick, and will burn for months together if replenished twice in the twenty-four hours. The coke or anthracite coal

is put in at the top, and there is a water-vaso for evaporation. Gurney's is another capital stove, combining the principle of the Gill air-warmer and Dr. Arnott's slow-combustion; but it cannot be used with a descending flue. Pierce's Pyro-Pneumatic

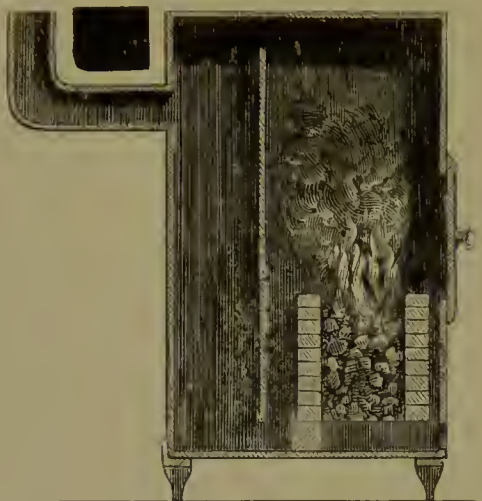


Fig. 6.—ARNOTT'S STOVE.

Stove, which has an open fire and warm-air chambers constructed within the fire-bricks, is more elaborate and expensive, but admirable in its mode of working. Air is supplied to the chambers from outside, and after attaining a moderate temperature is allowed to circulate in the house; and with this stove there is no smell, no one complains of head-ache or dizziness, draughts from doors and windows are checked, and the house is comfortably warmed, while the hall looks cheerful with an open fire.

The German stove is a very good one, and economises the heat. This is accomplished by means of an internal arrangement, which compels the heated gases from the fire to pass backwards and forwards through flues in the stove before they take their final départure into the chimney. After the fire has been lit, and has burned up well, the doors and dampers are all closed, so as to prevent any draught passing through the stove and carrying the heat away up the chimney; the fire is allowed to go out, and the heat passes through the body of the stove into the hall or room, wherever it is placed. This kind of heat-giver produces no ventilation, and is not, therefore, really good, because it economises fuel at the expense of health. Messrs. Doulton, of Lambeth, have, however, adapted them so as to warm fresh air admitted from the outside, as may be seen in Fig. 7.

Iron stoves, whether cast or wrought, should always be lined with fire-brick, to prevent the fire from coming in direct contact with the metal, as carbonic oxide is produced by the oxygen of the air

acting on the carbon in the cast iron if heated to a red heat. This is largely the cause of the peculiar and oppressive dryness of stove-heated rooms; and is the reason of the custom of placing a saucer or vase of water on a metal stove.

A very nice stove is Cornforth's "Little Wonder," which has hollow bars at the bottom, the air being heated by passing through them, and then admitted to support combustion, so as to prevent the production of smoke. Jobson's Slow-Combustion Gill Stove is a good one, and consists of a number of open frame-like diaphragms laid side by side, and bolted together with front and back plates, forming a close stove with twenty exterior gills. It is divided into two unequal parts by a vertical partition, the larger of which is the fireplace, which has a grid at the lower end and an ash-box. The draught goes upwards first for lighting the fire, and can then be reversed, passing downwards through the grate and upwards, through the smaller compartment, to the flue. The gases are met by a current of air issuing from the hollow partition to be consumed. Doulton's Spiral Stoves are good, and consist of several superposed rings, forming chambers, in the lowest of

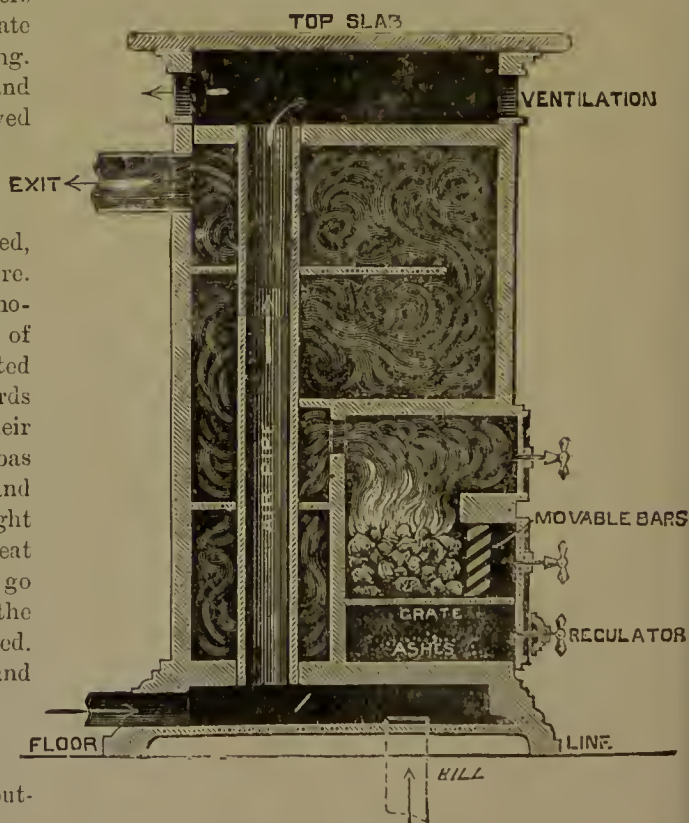


Fig. 7.—DOULTON'S STOVE.

which the fireplace is formed; from whence the gaseous products rise into and pass round each ring

in succession, escaping from the uppermost of them into the chimney. These rings are supported on one another by perforated edges, through which air enters and becomes heated, before passing into and flowing up the central cylindrical shaft, from whence it is discharged through a perforated covering. More air is admitted into a compartment next the fire-place, and, being heated, there joins the other currents of air and finds its way out at the top. Messrs. Doulton also make a stoneware "Top-Feeding" stove, which is square and upright, divided by a vertical partition, on one side of which the coal is placed, and out of which it gradually falls to replace what is consumed. The gaseous products of combustion pass through an opening near the base of the partition into the other compartment, where they meet more air, and from the upper part of it they find an outlet into the flue. Fresh air is admitted into lateral warming-spaces, from the upper parts of which it escapes into the room.

Some few stoves, and very efficient ones, are on what is called the "Base-burning" principle, for anthracite and other smokeless fuels. One peculiarly suitable for halls is the "Crown Jewel." The fuel is burned in a hemispherical cast-iron fire-basket in three pieces—body, grid-saucer, and a sliding-plate below all. Some air comes through the grid, and more through the body, which is grilled all round the lower part. The draught passes over the edge of the fire-basket and descends to the base, where it circulates below the ash-pan, and then passes off to the chimney through a back flue. Another good anthracite base-burning stove is the invention of Franz Lönholdt, which can be regulated so as to burn for several days and nights with one supply of fuel. If charged with fuel at regular intervals of from twenty-four to forty-eight hours, this stove will burn continuously throughout the winter; but we do not know if it can be obtained in England.

Gas-Stoves.—Gas-fires in bedrooms and sitting-rooms are very useful, especially those where the jets of flame are distributed among lumps of asbestos, which speedily get red-hot and throw out a nice heat, as well as having a cheerful appearance. They are economical in two ways—first, because directly they are turned out the consumption of gas—*i.e.*, fuel—ceases; and, secondly, because they make no dust and save a great deal of a servant's time. If there is no escape from any of the pipes, they are not unhealthy, as with them it is very easy to regulate the temperature of a room; and a vessel of water judiciously placed in the front prevents the air from becoming too dry. But persons who live in a neighbourhood where the pressure of gas is very small during the day, and is only turned on full in winter between

the hours of four and ten p.m., will find gas-fires a delusion and a snare. Given a bitterly cold day and a drawing-room where there is only an apology for a fire before dark, and where that fire again dwindles to the most limited dimensions by half-past ten, and the occupants will sigh for the good old coal fire, and go shivering to bed. It is not so everywhere, however; and in a part where there are comparatively few shops, and the management of the gas-works is not conducted on *too* economical principles, most private houses will find that they have an ample supply for a small gas-stove in the kitchen, a good one in one sitting-room, and as much as is wanted in one or two bedrooms, just to warm them while going to bed and again while dressing in the morning.

There are other ways of using asbestos with gas besides the lumps we have mentioned. For instance, there is Hislop's metallic gas-fire, in which a fire-clay hollow backing (in which particles of iron are mixed) is placed on a solid floor-plate and covered with pieces of asbestos. The gas is turned on into the backing, and discharged through many small orifices into the body of asbestos, which it soon heats to incandescence.

Many makers supply incandescent radiator fires, which answer very fairly for a small room where there is a good pressure of gas. A fire-tile in an iron frame, with asbestos tufts on the face, is hung perpendicularly, and heated by jets of gas mixed with air from the lower edge. The tufts become incandescent and look cheerful, besides giving out a good deal of heat; but unless there is plenty of gas, only the lower tufts become red-hot, and then it neither looks bright nor gives out much warmth.

Dr. Siemens unites gas with solid fuel by means of coke, of which the following description has been given by Messrs. Waddell and Main, the firm who put his idea into shape and exhibited it:—"The back of the fireplace is covered by a wall-plate of copper, reaching half above the floor-plate of the fire and half below. The floor-plate or 'dead-plate' is riveted to the wall-plate, and stops short about an inch from the front bars. Into this interval a half-inch gas-pipe is laid, drilled with one-sixteenth of an inch holes one and a half inches apart at the upper side, inclining inwards at an angle of 50° with the vertical. A supply of heated air for combustion is provided by the insertion of a kneed iron plate under the dead-plate and near the wall-plate, so as to form a kneed channel one inch wide, through which the air ascends at the back and then passes horizontally to the front, where it meets the jets of gas. The air is heated on its way through the passago thus provided for it, and the heating-surface is augmented by the insertion of a corrugated sheet of copper in the

vertical part of the passage, subdividing it into channels; so much so that the air, it is said, can be raised to upwards of 600° Fahr. of temperature. The flame and hot products play upon, and are dispersed in, the body of coke laid upon the dead-plate; the coke is thus ignited, and becomes incandescent. After it becomes thoroughly ignited, the gas may be turned off."

The Lux Calor gas-stove consists of one or two hollow columns or tubes on a hollow base, which support a hollow chamber on the top. One or more gas-jets burn near the upper part, from which the gaseous products are conducted into the upper chamber, from whence they pass down inside the columns. The products are cooled and partially condensed, collecting at the bottom, where the remaining gas is passed off behind into the room. The inventors affirm that no flue is required; but we repeat that *burnt gas is poison* in a room under any conditions whatever, and that no stove is safe which does not provide for the complete removal of the products of combustion from the apartment it is desired to warm.

Oil-Stoves.—Of late years another combustible has forced its way to the front, and a great many stoves have been invented for its consumption. This is paraffin, or natural mineral oil, which, after undergoing various refining processes, is known by as many names. Its chief drawback is the smell; but this may be avoided by care and cleanliness, as well as by the construction of the stoves, which is continually being improved. These stoves really consume very little oil in proportion to the heat given out. Oil-stoves are also advertised which are said to need no flue, the fumes being stated to be "condensed into water." It need hardly be said that such is an impudent fiction, and that no stove can be used without a flue, except at the risk of health; unless, perhaps, where there is such a draught as to rapidly carry the products of combustion away.

Martin's Lighthouse Burner of 40-candle power makes a very nice little stove, and is much in favour. When it is used for a greenhouse, there is a reservoir for water placed on the top, which prevents the air from being too quickly dried, and produces the moist heat so favourable to vegetation.

Fuel.—Fuel must be considered in connection with the expenses of a locality, and the kinds of stoves and kitcheners in use. London used to be supplied with sea-borne coal, brought by fleets of colliers from the Tyne to the Thames. A regulation, made with the best intentions by the civic authorities, that no coal should be sent out to purchasers except in sacks containing 2 cwt. or 224 lb. each,

originated in the character of this North Country coal, which is in small, very small lumps, and a great quantity of "nubbly" bits—say, half-inch cubes and less. But this very regulation, made in the interest of consumers, has led of late years to the hard Midland county coal, which can only be profitably burned in blocks, being broken up small, put into sacks, and passed off as sea-coal; and the Londoner, failing to understand the dirty rubbishy sort of fuel he was supplied with, was driven nearly to distraction. If he had had his Derbyshire or Leicestershire coal in large pieces—say, blocks big enough to nearly fill an ordinary grate—and known how to manipulate it, he might have found it profitable; but when broken up small, it is only a delusion and a snare. Sea-coal is full of gas, and keeps up a very bright fire; but unless frequently put together, and now and then stirred, it goes out very rapidly.

Midland county coal requires quite different treatment. The fire that has to be lit in the morning is made from half-burned cinders, with a few small pieces of coal, and when fairly alight a large block is put on. This remains for an hour or two, and when knocked quite slightly with the poker falls into horizontal flakes, and makes a splendid fire. The old-fashioned way of treating it was to put on a large block of coal (locally known as a "raker") the last thing at night, and in the morning to knock it to pieces, when a brilliant fire was instantly obtained. Thence arose the saying that on English hearths the fire was never out. But the same kind of coal when broken up into small lumps is dead and lifeless, and gives out a very small amount of heat. North and west of London, and in fact everywhere on the London and North Western, the Great Western, the Midland, and the Great Northern lines, splendid coal of this kind is to be had by the truck-load at from 14s. to 15s. per ton, and less, according to distance from the pit's mouth, with perhaps a shilling or two added if the distance is two or three miles from a railway station; but south of London, coal is despatched from metropolitan merchants, and becomes at once a costly commodity. In the eastern seaports, however, and some few others, the sea-coal comes direct from Northumberland and Durham by water. The Isle of Wight is entirely supplied in this manner for to bring the harder coal would involve carriage first by rail and then by sea, making two loadings and unloadings necessary. This would never pay, and consequently coal, all of which has to be brought at low tide in carts from the colliers lying off Ryde, is dear, but splendid in quality for sitting-rooms, though wasteful in kitcheners, because the small gassy coal burns out too rapidly in a close stove. Economical people living on the coast often club together for a shipload, landed at their own

doors, as it were; but they have to arrange for the whole cost of bringing it from the ship to the coal-cellar.

Steam-coal, anthracite, or cobbles, are capital coals for kitcheners and slow-combustion stoves, where they can be had; and the thrifty servant, when her dinner has been dished up, puts on a certain quantity of "slack" or coal-dust slightly wetted, and does the same to the sitting-room fires. This is called "backing," and is admirable for rooms which perhaps are not in actual use, but where it is desirable that a fire should be kept in; and is also useful in mild weather, such as sometimes prevails for two or three winters together.

The housekeeper who is accustomed to Midland county coal knows that in the process of breaking the larger blocks with the hammer, quite as much "slack" is produced as can be burned in her household; but since it is one of the coal merchant's objects to dispose of his superfluous "slack" at the price of ordinary coal, she will look out to see that the men do not build up the blocks of coal in her cellar with an empty space in the middle, into which convenient reservoir they endeavour to pour a quantity of dust and slack from the bottom of their carts. Another precaution taken by the prudent housewife is to see that each block of coal, as its turn comes to be broken smaller, is laid on the floor before the application of the big hammer. The ordinary servant, male or female, thinks it much less trouble to break one block on the top of another, thus pulverising the lower one unmercifully, and producing twice or thrice as much "slack" as can profitably be used. Mr. Mechi, in his early trials of slow-combustion stoves, spoke of this slack-coal as valueless to colliery owners, and told how cheaply he procured it by the truck-load at Tiptree, and what good use he made of it.

The proportion aimed at by careful housekeepers accustomed to this kind of coal, is with each ton to make no more slack than can be used in the copper and as "backing" during the period that the larger coal lasts. No worse mistake can be made than breaking it into too small pieces.

A custom unknown in London, but quite common in northern England, is to have a ton or two of "cannel" or "king" coal in a separate cellar, which is kept locked; and the master or mistress, unless they are very grand people, will fetch a small block from time to time, and put it on the fire to produce extra flame and brightness. This coal scarcely soils the fingers at all.

The use of a poker applies solely to two points: the opening of a dying fire to admit the free passage of the air into or through it, or else putting together the remains of a half-burned fire, so as to concentrate

the heat. Whilst the parts still ignited are opened to the air, the mere blowing of bellows at random will often fail, the force of the current of air sometimes blowing out the fire by carrying off the caloric too rapidly, and at others directing the warmed current from the unignited fuel, instead of into it. To prove this, let any person sit down with a pair of bellows before a fire that is partially extinguished, and blow, at first, not into the burning part, but into the dead coals close to it, so that the air may partly extend to the burning coal; after a few blasts, let the bellows blow into the burning fuel, but directing the stream of air partly towards the dead coal, when it will be found that the ignition will extend much more rapidly than under the common method of blowing furiously into the flame at random.

Briquets are made of coal-dust wetted and formed into blocks; they are inexpensive, and really valuable and economical, for they contain good coal, made available for burning by being solidified.

There is a time for all things, and most emphatically there is a time to buy coal, which is *not* when the cold weather sets in. The lowest summer prices are usually reached in August, and orders booked then, and at those prices, can sometimes be delivered later on and at intervals of a few weeks, to meet the convenience of householders who have no proper and adequate storage for coal. The coal-cellar, except in old-fashioned houses, is now a blessing of the past; and in the ordinary detached or semi-detached suburban house, even if tolerably roomy in other respects, the accommodation for coal is under the front steps, or in some equally confined space, not accommodating more than from two to four tons, and utterly incapable of taking in a liberal winter supply for a large family.

Wood is a valuable fuel where it can be had at a moderate price. Where woodlands and hedgerows are being grubbed up, the roots are famous, and do not burn away nearly so fast as lengths of wood from trunk and boughs. In maritime places parts of old vessels are often to be had, and it is astonishing how much firewood they saw up into, and of first-rate quality. They are sometimes sold in loads ready sawn up. In some counties, such as Bucks, Berks, Oxfordshire, and Herts, and wherever woods abound, large quantities of firewood can be bought at very cheap rates; and Londoners connected with the docks and shipbuilding yards have good opportunities of securing loads of wood at moderate prices.

A store of pine-cones, picked up in a country where there are fir-woods, is invaluable for adding cheerfulness to winter fires. They are full of turpentine, and a few thrown on to a dying fire, which it is not necessary to replenish with coal, produce a blaze that is very pleasant and also fragrant.

Wood-smoke does not clog the atmosphere, as does that of bituminous coal; and the true aim and end of all contrivances on the slow-combustion principle is to prevent the formation of smoke by a more complete burning of every particle of fuel. Smoke is really and truly a fine dust composed of carbon; but this carbon dust can be burned, and this is the secret of the prevention of smoke-production.

Smoky Chimneys.—A house in the neighbourhood of a loftier building will most probably have smoky chimneys. Straight chimneys do not draw well, and it is essential that the chimney be of considerable length. The modes of curing smoky chimneys are various, and depend on the circumstances of each particular case.

The contrivances used in the metropolis are different forms of tin cowls fastened on the chimney-pots and made to revolve, so that the mouths always present themselves away from the wind.

The chimneys of rooms very near the house-roof often smoke on account of the down-draught; but builders of late years have adopted a style of building chimneys that turn or slope from side to side, and the chances of smoky ones are much diminished since.

Hot-Water, Hot-Air, and Steam Pipes.—Some houses have no detached stoves or grates at all, but are heated entirely by systems of pipes from one central source of heat. In some cases such a circulating system as described in a previous article (page 342, Vol. I.) can be made useful in warming the parts of the house it passes through; but more usually, when the hot-water system is adopted, a separate boiler is employed. What is called a saddle-back boiler, set in brick-work, is generally needed for establishments of any size; but for small systems

there is a kind of upright cylindrical slow-combustion boiler made, which does good service. In England, hot-water pipes are generally employed, hot-air pipes are less frequent; in America, where the climate is so much more severe, steam systems are in extensive use, and have been brought to great perfection. It is, however, needless, and would be out of place, to attempt to give here details of such methods of heating, as they are only likely to be adopted by owners of the houses they live in, and would then have to be carried out by some competent engineer.

There is often real economy in this method of heating, especially in the saving of labour, which is very great. A fire must, however, be kept up constantly if the pipes are not to grow cold, and that is one drawback, and forms the chief obstacle to employing the kitchen-fire itself in such work. A powerful kitchener, such as would be needed for a large mansion in any case, would be quite capable of supplying a hot-water system of pipes; but the necessity of always keeping it up would be a very serious inconvenience. Another drawback is, that it is less easy in these systems to study individual peculiarities. People differ a great deal as regards the aid they require in keeping up their temperature; and practically it is often found, where such systems of heating prevail, that the majority have to endure a temperature distinctly too high for their health or comfort, in order that certain individuals may be warm enough. All the inmates have to be treated in the mass, or on a level, as it were. Hence it happens that such systems of heating are chiefly employed in countries where the climate is extreme, and the seasons tolerably uniform, or in very large establishments: and they are little likely to become very general where the climate is so mild, and at the same time so changeable, as it is in England.

CHILDREN'S PARTIES.

In speaking of all kinds of informal parties, the young people must not be entirely forgotten. They would feel themselves very much neglected were no mention made of juvenile parties. Where there are two or three children in a household, a children's party is not only a great pleasure, but very often a necessity also. Children greatly enjoy visiting their young friends, and have no objection to going to parties; and if they do this, the laws of hospitality demand that those young friends shall be invited back again.

People who give children's parties, however, very often seem to forget that the object of the entertainment is to give the children pleasure in a sensible

way, so that they and their parents do not suffer for it afterwards. If children are kept up beyond their usual bed-time, although for a short time they enjoy the idea that they are staying up late, that enjoyment only lasts a very little while, and they soon begin to feel cross and tired. If they are given rich food, they are sure to be upset the next day, and cause worry and trouble to themselves and others.

A children's party, to be successful, must be given at a reasonable hour; then the little ones will feel happy and fresh the whole time, and will not get tired of themselves and every one else. Also it must not last too long. The fare provided must be simple and digestible; and the rooms must not be too crowded.

The Guests.—It is very important not to invite a larger number of children than the rooms will comfortably hold. This is a mistake very often made by hostesses who wish to pay off all their social debts at once. They invite all the children they know, and the result is discomfort to every one and enjoyment to nobody. If the children are to enjoy themselves, they must be able to run about and to play at games with one another, and this they cannot possibly do if the rooms are crowded. Another important point to be remembered is that there must not be too much furniture to fill up the room. And therefore a modern drawing-room, full of pretty uicknacks and ornaments, is not at all the place for a party of children. A large empty room, in which the juvenile guests could have a good frolic, would be much more suitable for the purpose.

Very young children are out of place at a juvenile party. They are frequently asked out of compliment to their mothers, and these fond parents send them elaborately dressed to be admired and petted. They are probably shy and afraid of strangers, too young to play with the older ones, and yet unwilling to sit still, and they may quite spoil the afternoon for every one. If children are not old enough to play with others and enjoy themselves, they are scarcely so much children, as infants, and are far better in bed than at a children's party.

Superintendence.—When a children's party is to be given, hostesses make a great mistake if they expect their little guests to amuse themselves. Tea will probably be served as soon as all are assembled, and until tea is ready, picture-books should be at hand to amuse and please all. If the children are invited at a very early hour, and there is time before tea for games, older persons should be present to suggest games and to arrange them. The whole plan of the entertainment must be settled beforehand, and there should be two or three sensible grown-up people present ready to carry it out. These "grown-ups" must be the right kind of people, fond of children, and fond of children's games, and not afraid of hard work, for a children's party means very hard work for the older people.

Entertainments.—By far the easiest way of amusing a number of children is to provide a special entertainment for them. A magic-lantern, if it is a good one, will pass away an hour very pleasantly. The magic-lantern must be a very good one, however, and must be shown by some one who thoroughly understands it—not by an enterprising young friend, whose intentions are very good, but whose ideas on the subject are crude

and decidedly original. Nothing is more tiring than to sit in a darkened room, which smells disagreeably, waiting for the wonderful pictures which follow one another very slowly. Magic-lanterns frequently turn out to be delusions, though if well managed they may be made most enjoyable.

Punch and Judy is a very good entertainment, and a good conjurer may give great pleasure. These are, however, rather expensive treats, and people do not always care to spend money in this way.

Christmas-Trees.—If a children's party is given near Christmas-time, a Christmas-tree is generally a refuge for hostesses, and it is a very safe one. Every magazine is filled with hints for Christmas-trees, and it is not difficult to hang a tree with pretty gifts which have cost, not money, but trouble. Children are often more pleased with simple gifts than with costly ones. They greatly prefer anything which can be played with, to anything, however pretty, which must only be looked at. In making presents to hang on Christmas-trees it is well to bear this in mind.

Beautiful wax dolls delight children, of course, but a wax doll is easily broken; and to prevent such an accident happening, the very handsome doll is put in a drawer when it is brought home from the party, and only brought out on special occasions.

Capital dolls for fastening upon Christmas-trees may be made out of old coloured fashion-plates. These dolls look pretty, are fairly durable, and when torn or soiled are easily replaced by others made by the children themselves. The grand ladies from the coloured plates should be pasted firmly upon stiff paper or thin cardboard, and then carefully and neatly cut out. All the figures on one plate cannot be used, as one will overlap another; but those figures should be chosen which are represented in a standing position, with the arms free from the body.

The dolls thus prepared will then require dressing. This is easily accomplished by sewing pieces of material—silk, satin, or lace—upon them to form skirts and bodices. Any old pieces of material can be used, and any style of dress may be adopted. In business of this kind there is abundant exercise for the fancy, and with a little taste the dolls may be made to look quite pretty and stylish. The stitches must be neat, but not too neat, or the doll will look flat. The whole figure, with the exception of the hands, feet, and head, must be draped with the material. When dressed, a piece of stiff cardboard or wood should be gummed behind the feet of the doll to make it stand, and the toy will be complete.

In this way pretty dolls can be made for children

very cheaply and quickly. Any child who can use a needle at all can dress one of these paper dolls, and will find great pleasure in so doing.

Another easily-made toy for a Christmas-tree gift is a picture puzzle. Any coloured pictures may be used for this purpose. The colours should be bright and attractive, and it will be all the better if the picture represents a scene from a nursery rhyme or a fairy tale. Two pictures of the same size should be carefully gummed on either side of a strong piece of cardboard. The pictures must be made to lie as flatly as possible, and there must be no creases or wrinkles in them. If they are made damp in warm water before being gummed, they will probably be smoother. When both the pictures are quite dry, the edges of the card should be neatly trimmed with a pair of scissors, and then the card must be cut into pieces with a sharp knife. If the puzzle is intended for a very young child, the pieces should be square-shaped, and not too small; but an older child would probably prefer a more difficult puzzle, and then the pieces should be small, and of an irregular shape.

Maps from old atlases may be treated in the same way, and are very suitable presents for older children. The pieces of the puzzle should be mixed together, put into a small box, and tied with ribbon. Old box-covers may be used instead of cardboard, or stiff covers of note-books would answer the purpose equally well.

Perhaps the most serviceable dolls are the rag-babies, and these can be made very successfully at home, especially if any member of the family is artistic, and can supply the dolls with pretty faces. Children do not, as a rule, care for a new doll if she has not a pretty face, and nowadays some of the rag-dolls are made to look quite handsome.

The stuffed animals are newer than the stuffed dolls, and give very great pleasure to small children. If they are well made, they last for a very long time, for they are unbreakable. That is one recommendation, and a great one; but there is perhaps a greater, and that is, there is nothing in them that can harm the children. They are soft, without hard corners, and have no paint on them. These animals can be made quite as easily as the rag-babies. The demand for them has been so great that it is now possible to buy patterns of the various animals for a few pence. With these patterns, there is of course no difficulty in making the animals, and a complete Zoological Gardens can easily be obtained. The stuffing of the bodies, and especially the legs, of the animals must be very firm and tight, or the creature will not stand when it is finished, and half the charm will be lost. These toys are suitable for all young children, and they will be found to be

universal favourites. There could be no better gifts for a Christmas-tree than these.

Many children have dolls' houses of some kind or another—whether they are grand bought ones, or home-manufactured ones—and pieces of toy furniture are usually welcome presents.

Toy furniture is another gift that may be made at home and hung on a Christmas-tree. Every small girl probably knows that two ordinary Bryant and May's match-boxes make a most elegant old-fashioned bedstead. The boxes, not the lids, must be used, one box doing duty for the head of the bedstead, and the other for the bed itself. They must be placed at right angles, and should be made to fit into one another. A few firm stitches keep the boxes in place, and then the frame is ready to be covered with coloured glazed lining, and draped with muslin curtains. Filled with diminutive sheets, small mattresses, and pillows, a match-box quickly becomes a pretty but small bed.

Other furniture for dolls' houses may be manufactured out of cork and pins. Chairs, tables, and sofas can all be made in this way. For a chair a small piece of cork is needed for the seat. This must be covered first with wadding, and afterwards with material of some kind. The legs of the chair are made by sticking strong large pins into the four corners of the cork. They must be fastened firmly, and then hidden by wool being wound very tightly round and round each pin. The wool should be of the same colour as the material which is used to cover the seat, and it must be very carefully fastened off. The back of the chair is made by sticking pins closely together, one beside the other, into the cork, the pins again being hidden by the wool being wound round them. All that is necessary is a little care in fastening off the wool, to prevent its coming undone. In this way chairs and tables of different shapes can be made. If a high-backed chair is admired, long pins must be used; or if a low chair is needed, short pins are the best.

A child's ball is a toy easily made, and it looks very pretty dangling from a Christmas-tree. It may be made either of crewels used double, or of Berlin wool; the point to be aimed at is to have bright showy-looking colours which will go well together. If two colours only are employed, the stripes should be made in each colour alternately; when several colours are preferred, these should be arranged in order. Use steel knitting-needles, and cast on an even number of stitches. If Berlin wool is used, forty stitches will make a ball of moderate size. Knit plain backwards and forwards. First row: knit all but two, turn round, slip one stitch, and knit backward all but two; turn again, slip the

first stitch, and knit all but four; and thus continue, leaving each time two stitches more than last time at each end of the needle, until only four stitches are left in the middle of the needle. Now take wool of another colour, knit straight across once, then repeat the directions already given, knitting to within two from the end, turning, slipping the first stitch, leaving two stitches at the end again, and continuing until only four stitches are left. In this way rounded sections, broad in the middle and narrow at the ends, will be formed. When fourteen sections are complete, cast the wool off, stuff the ball compactly with cotton-wool, and sow the ends together, and the ball is complete. If it is intended for a baby, it might have a pill-box with two or three small buttons placed in the centre of the cotton-wool, and it would thus be converted into a rattle as well as a ball.

The toys here named are merely examples showing what can be done *at home*, and they are only intended to show that a Christmas-tree need not always be a very expensive entertainment.

The question of the distribution of the presents upon the Christmas-tree is sometimes a difficulty. The plan of numbering the presents and handing duplicate numbers, shaken in a bag, round to the children, is rarely satisfactory. When the tree is stripped and the gifts distributed, it is generally found that the wrong children have drawn the various articles. A boy is sure to draw the prettiest doll, and a girl finds herself presented with a box of soldiers and a marvellous top. Of course it is possible for the children to change; but this is a most unsatisfactory arrangement.

It is far better to arrange the presents beforehand, to label each one with a child's name, and not to trust to chance. Some people prefer to deck the tree with lights, fruit, coloured balls, and a few wholesome sweets, after the German fashion, to make it pretty to look at, and to let the children dance round it.

During the last few years Christmas-trees have rather gone out of fashion. One of the guests, or one of the family, is dressed up as Father Christmas or as Santa Claus, and he arrives with his sack on his back, and distributes its contents to the admiring children. This is a very usual substitute nowadays for the Christmas-tree of days gone by. The choice of entertainment is entirely a matter of taste, for children always enjoy a tree quite as much as a Father Christmas.

Theatricals and Charades.—Amateur theatricals are almost as popular among the young people as among the older ones, and a performance by the children of the household is certain to be

appreciated by their young friends. Children are always fond of fantastic dress, and the next best thing to being dressed up themselves is to see other children gorgeously attired in gold crowns and ermine robes. The amateur theatricals need the supervision of an adult—they need rehearsals beforehand, and much preparation; but they are certain to give great pleasure, both to performers and audience.

Charades are more easily managed than theatricals, less being demanded in them. They are generally popular if well managed, which really means being planned and arranged beforehand a little, so that all may go quickly. It is the tiresome *waiting* during preparation which is so annoying.

A **Shadow Pantomime** is less difficult to manage than actual theatricals, and can be made most amusing. A sheet hung across a doorway, with a candle behind it to throw a shadow, will answer the purpose admirably. The audience sit inside the room in darkness, and those taking part pass between the light and the sheet, and throw their shadows on the sheet. In this way, without any dressing or elaborate preparation, the children can play at Shadow-buff. Those watching the performance must try to guess what child is throwing the shadow, and those causing the shadow must try and disguise themselves as much as possible.

Very little dressing changes Shadow-buff into a Shadow Pantomime. The nursery rhymes can be represented by the means described with very little trouble. An old-fashioned hat, a big pinafore for a snook, a sun-bonnet, and a pail, quickly turn two children into Jack and Jill. A large outline of a shoe cut out in cardboard, behind which children are seated, with a girl in a tall cap, a birch-rod in her hand, standing by it, represent with very little trouble the old woman who lived in a shoe. When a shadow only is shown, outline only is needed, and details of dress need not be attended to, because they are not seen. When each nursery rhyme is arranged on the screen, the children should be asked to guess it—not simply by saying the name of the rhyme, but by singing it together.

Games of all kinds are, of course, most welcome at a children's party. They must have plenty of fun in them, but should not be too boisterous.

"Dumb Crambo," "Hide-the-Thimble," and "Post" are all games suitable for occasions of this kind. It saves much trouble, and makes a pleasing variation, to give each child a number, instead of the name of a town, in playing at "Post." Then two numbers are called, and the two children owning them change places, whilst the blindfolded child standing in the middle of the room tries to catch them. If large

figures cut out of advertisements and pasted on lining are pinned on the children, still more trouble is saved, and the children have no difficulty in remembering their numbers.

"**Hide-the-Thimble**" is a game not so well known as "Post," but it is very amusing. It is not a noisy game, and is very useful on that account, as it may be sandwiched between two energetic games, such as "Blind Man's Buff" and "Musical Chairs," with great advantage. It is very popular with children, and has even been found useful to amuse older people. It is so simple that every one quickly learns it.

All the children with one exception must be sent out of the room, after having been shown a silver thimble. Each one must look at it carefully, so that he or she will recognise it again. The one child left in the room must then place the thimble in some position where it can be seen by any one carefully searching for it. It must not be actually hidden, but must only be put in some unlikely place. Then the other children should be told to come into the room, and look about them to see if they can see the thimble. The one who first sees it must sit down without telling the others where the thimble is placed, and each one in turn must take a seat when he or she has discovered the hiding-place.

So the game goes on until all have seen the thimble, and then the one who first discovered it has the privilege of hiding it again. It is wonderful how much fun may be got out of what seems such a simple game. Great skill can be shown in the hiding of the thimble. Sometimes what seems a most prominent place will turn out to be very difficult to find. As a rule, if the thimble is placed on or near something of the same colour as itself, it will be less easily discovered than if it is near something of a very different colour.

Any small article about the size of a thimble may be used for this game; but whatever is hidden should always be shown to the seekers before they are dismissed from the room.

"**Dumb Crambo**" is a game which has been played very frequently of late years. If amateur theatricals are for any reason considered undesirable, "Dumb Crambo" helps to supply their place. No preparation is needed, and all the children are able to take part in "Dumb Crambo;" but the result is not of course nearly so satisfactory to the audience as theatricals, though undoubtedly much fun and laughter may be caused.

The children should divide themselves into two, or even three, groups to play "Dumb Crambo." If the children are very young, an older person should be

made captain of each group or party. One party then leaves the room and prepares to act, whilst the other decides what is to be acted.

A word is chosen, and also another which rhymes with it. The word is preferably a verb, though nouns which can be expressed by action answer the purpose. The rhyme only is then declared to those who have left the room, and they are requested to guess the word chosen. The guessing, however, is only allowed by action, not by word of mouth. If possible, the word chosen should have several verbs which rhyme with it.

For example, the audience decide on the word "mow," and announce to the actors that the word chosen rhymes with "go." Perhaps the first word which suggests itself to the actors is "row." If so, they must go into the room and sit down on the floor in a line one behind the other, and move their arms as if they were in a boat rowing. They must not speak a word, only suggest by their action what word they have thought of. The audience will probably guess the meaning, and if so, they in their turn must "hiss" to show that the suggestion is a wrong one.

Different words, each rhyming with the one given, must be acted in turn. Towing, sewing, sowing, hoeing, and even crowing, may be represented; but each time the audience will hiss, until finally the action of "mowing" is represented, and then the efforts of the guessers will be rewarded by the clapping of hands instead of "hissing."

As has been already said, it is possible to represent certain nouns. For instance, in the example given above, the noun "row" could easily be suggested by several little girls standing close together whilst one walked up and down in front of them; the idea being to represent the celebrated Mary's "pretty maids all in a row."

The actors have to remember only one thing, and that is, that every one taking part in the act must go quite into the room before the representation begins; and the audience must remember that much more fun will be caused if they restrain themselves, and give the actors time for a short performance before putting a stop to their endeavours by the hiss or the clap.

"**Pinning the Tail on the Donkey**" is probably the most popular game at the present time, and paper donkeys with a number of paper tails are sold at the shops for sixpence and a shilling.

The paper donkey is pinned on the wall or on a curtain, and each child is taken a little distance from it and blind-folded. Then, provided with a tail and a pin, he or she is told to walk straight up to the donkey and fasten on the tail. Much amusement is

caused; because, even though the distance is very short, the tail is often fastened to the nose or the ear of the donkey, and is seldom pinned anywhere near the right place.

"Adverbs," "Proverbs," "Hold Fast and Leave Go," "Hiss and Clap," "Fox and Goose," "Cat and Mouse," "Oranges and Lemons," &c., are games too well known to need description. Many of the new games are really only revivals of old ones; and some of the old ones, such as "Hunt the Slipper" and "Blind Man's Buff," are still played as vigorously as ever.

"My Next-door Neighbour" is a new game very like an old one which has lately been revived. It is amusing for once, but unfortunately can only be played once. A child is sent out of the room, and on her return is told that each one has thought of a person, and she is to guess who it is by asking questions. As the person thought of is "my next-door neighbour," and as each neighbour is different, the answers are somewhat confusing, until the clue to the mystery is discovered.

The present generation of children is to be congratulated that some of the old games have quite gone out of fashion, and that more sensible ones have been introduced. "Dumb Crambo" is certainly a great improvement on "Kiss-in-the-Ring" or "Postman's Knock;" and no one who has been bored by it will regret that many of the children of to-day do not even know how to play at "Postman's Knock."

If the party is given at a time of year when the children can go into the garden, much pleasure will be given if basins of soapy water and clay pipes are provided for bubble-blowing. All children are fond of this amusement; and if the hostess is not afraid of her carpet, because she has wisely spread a drugget upon it, bubble-blowing might even form one of the entertainments at an indoor party.

Games at children's parties are not so popular as they used to be, because the children are very often too grandly dressed, and too anxious not to spoil their clothes, to enjoy a real frolic. Surely this is a mistake. The children grow old quickly enough, and are obliged to behave quietly and sedately soon enough, without being treated as if they were grown-up before their time. It is far better to dress them so that they can enjoy themselves without worrying about their clothes. The days of low-necked and short-sleeved dresses have happily passed away for children; but many children are still dressed very absurdly.

Dancing.—Many children are very fond of dancing, and this amusement is especially liked by

little girls. If arrangements are made beforehand, a dance some time during the evening is almost sure to be popular. At some children's parties dancing is the sole amusement of the evening, and the children are taught to consider all games beneath them. They are treated more like small grown-up people than healthy hearty children, and this is a very great mistake.

Of late years what is known as the cotillon has been very popular at children's parties. When this dance is decided on, the difficult question of choosing partners is settled, the dance is easily varied, and the interest kept up. The cotillon must, of course, be arranged to suit the children, and preparations for the different figures should be made long before the party commences.

Three or four figures will be all that will be needed—perhaps the ribbon, posy, looking-glass, and one other. For the ribbon figure, streamers of narrow ribbon of different colours—two pieces of each colour being provided—are fastened to a long stick, and each child takes hold of an end. Those having the same coloured ribbons dance together. In the same way, in the posy figure, flowers of different kinds are distributed, and those holding the same kind of flower dance together.

In the looking-glass figure, a girl sits on a chair in the middle of the room, and holds a looking-glass in front of her. The boys and girls pass behind her, and show themselves in the glass. If she does not wish to dance with them, she passes her hand over the glass, as if she would rub away the image. Each of her companions passes in turn, until at last the image of the partner of her choice is seen in the glass; then she nods, and gets up from her seat, ready for the dance.

In the ordinary cotillon, on each occasion the dance between the figures is a waltz; but when children are taking part, the dance should be sometimes a polka, sometimes a quadrille, and should be varied each time.

The figures that can be used are almost endless, and can be many or few, as desired. Two or three will, however, usually be found sufficient when the dancing is not to occupy the whole evening.

Occasionally a fancy-dress party is given for children, and each small guest is asked to appear in costume. This is usually very successful. The children thoroughly enjoy being dressed up, and look very pretty in their fanciful costumes. At the same time, an entertainment of this kind naturally makes the children think a great deal about dress, which is hardly desirable, and gives a certain amount of stiffness to the proceedings of the whole evening, because the children do not feel quite themselves in their strange costume.

Supper.—Supper is usually provided at a children's party as a matter of course. It must be ready at an early hour, and then it will be less likely to disagree with the children. Rich food is quite out of place for an occasion of this kind; it will not only be unsuitable for the small guests, but it will make them fretful and cross the next day. There is no need to provide elaborate dishes of meat for this meal. Children sensibly brought up are not accustomed to take meat late in the day, and a few simple sandwiches will be all that is necessary.

The dishes of sweets should be made to look very pretty and inviting, but should be simple. Children are fond of pretty-looking things, and will appreciate a tastefully garnished dish quite as much as their elders would. Fruit of all kinds, excepting nuts, will help to fill the table, and will be wholesome for the children; but the fruit should be so prepared that the children can eat it easily. This fact should be borne in mind in arranging all the eatables; everything should be so dished that it can be served and eaten with as little trouble as possible. Few children can manage to peel and eat an orange without making themselves and their neighbours at table uncomfortable; and if oranges are provided, they must be prepared beforehand.

Whatever else is put on the children's supper-table, bonbons must not be forgotten. If these contain paper caps and hats instead of sweets, so much the better. Plenty of bonbons filled with luggage will

give great pleasure to the children, and will help to decorate the table as well.

If the children are to enjoy their supper, arrangements must be made for them to sit at the table. It is too much to expect any child to eat food tidily from a plate held in the hand. This is another great reason against overcrowding. If there are a large number of children, they cannot all sit round the table, and disaster and disorder must follow.

Wine, of course, should never be provided at a children's party. Good lemonade and water are all that are necessary. It is not a kindness to offer wine to children who are quite unaccustomed to it at home; and children who have sensible parents are not accustomed to drinking wine at any time.

Doctors, as a rule, strongly object to children's parties, and declare them unhealthy, unwholesome, and injurious. Parties at which the children are given rich food, and are kept up until long after their usual bed-time, do harm without doubt. But if the children assemble early, play sensible games, eat simple food, and leave at a reasonable hour, they may thoroughly enjoy themselves, and be as well the morning after the party as the morning before. It is not a bad plan to name the hours at which the children are expected to arrive and depart; though it is not absolutely necessary to put it quite as bluntly as a child once did when she wrote her invitations herself, and put in the left-hand corner, "Come at four and go at eight."

APRONS AND PINAFORES.

FANCY APRONS have of late years been worn very generally not only by young girls, but by grown-up ladies. When prettily made, and of a colour which harmonises with the dress, these aprons look charming, and they preserve the dress wonderfully. Being made of washing materials, they can be readily renewed. The following patterns are easily made up, and are very effective.

Apron No. 1.—Take a piece of material about three-quarters of a yard long (selvage way), and a yard wide. Make it into an ordinary old-fashioned apron, and fit it into an ordinary double-band, measured to fit the person for whom the garment is intended. The apron should be fitted into the middle of the band, and about four inches of band should be left plain at each end. This may have black velvet, ribbon, or coloured sash ribbon attached, so that the apron can be tied back in a handsome bow. Now take a strip of the material cut selvage way, and six inches wide, and hem it on both sides; the length must depend upon the height of the

wearer of the garment. Find the exact centre of the band, then run and gather the two ends of the strip, and sew them on each side of the centre, making each one occupy about an inch and a half of space. Make two runnings at the top of the band, to keep it from spreading when in wear. The strip when put round the neck will form the waist of the apron. An apron of this shape, made of fine soft muslin, and trimmed with bright-coloured bows, looks particularly dressy and natty.

Very often, however, instead of being made of the short length here described, the apron is made so long that it reaches to within three or four inches of the bottom the dress (Fig. 1). It is then tucked with fine tucks at the bottom. Or it may be made almost plain in the front, and ornamented with a frill at the bottom, as in Fig. 2.

Apron No. 2.—Take a piece of coffee-coloured muslin three-quarters of a yard long, and three-quarters of a yard wide; make a two-inch hem at the bottom, and a one-inch hem at the right side of

the apron; on the left side put a broad piece of coffee-coloured lace eight or ten inches wide. Set



Fig. 1.

the muslin portion of the apron into a band made to fit the wearer; but instead of setting the apron into the centre of the band, pleat it in narrow pleats into

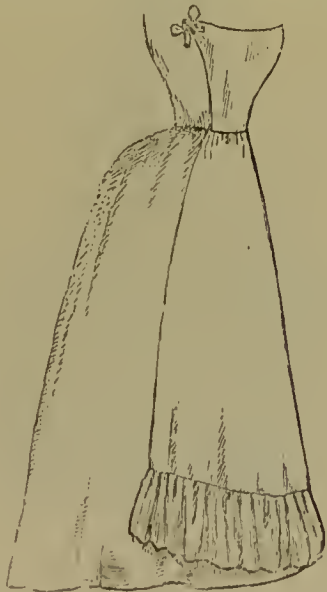


Fig. 2.

the end of the band at the left-hand side. The lacy portion of the apron should not be pleated: it should

be set straight. The band of the apron will now fasten at the side instead of the back. Take about three-quarters of a yard of the lace, and cut it in two lengthwise. Upon each portion at the side that is cut lay a strip of coarse muslin or canvas, and fold the lace over and over, leaving half an

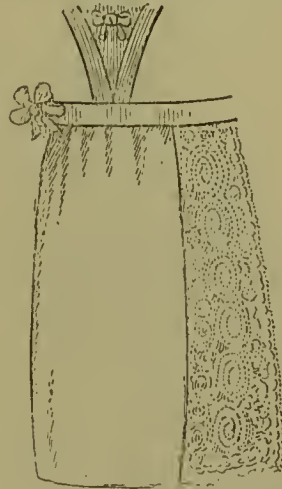


Fig. 3.

inch at the edge unfolded. Fasten the two ends of these folds upon the band of the apron, placing them in the centre of the part of the band which is occupied by the skirt of the apron. Join the edges of the lace for about two inches above the band. When the apron is in wear, place one band of lace over one shoulder, and the other band over the other shoulder, hem the loose ends of the lace,

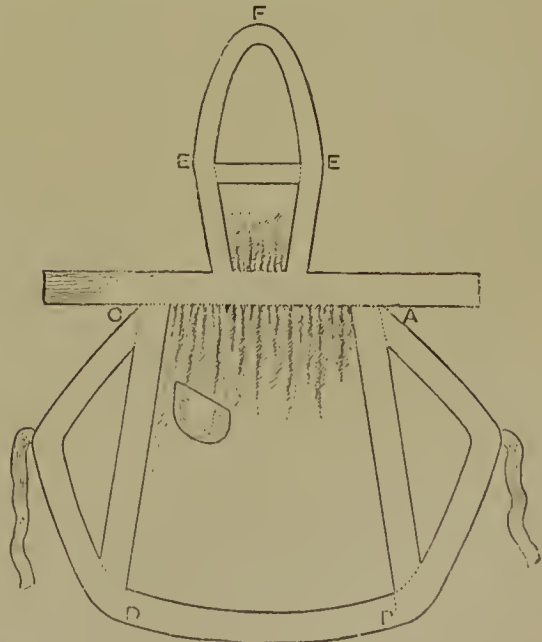


Fig. 4.

and pin them in position. When worn with sky-blue or cherry-coloured ribbon, this apron, made of



Fig. 5.

coffee-coloured muslin and lace, looks very pretty. (See Fig. 3.)

Apron No. 3.—German Housewife's Apron.—Take two large square handkerchiefs: cut the border off one, and put it at the bottom of the other to make a frill. Take the second square, the one from which the border was taken, and cut out of it the waist, the bands, and the pocket of the apron, being careful to keep two corners for the sides of the square. Run and fell these crossway sides to the sides of the apron, as in *A B* and *C D*, Fig. 4. Fasten a piece of ribbon at each corner for tying purposes. Set the apron into the centre of a band made to fit the figure, and let two or three inches of band be left plain at each end. To make the waist, take a piece of the material seven inches square. Hem three sides of this, and pleat the fourth side into the centre of the band, allowing it to occupy about four inches of space. When the apron is in wear, pin the topmost corners of the waist-piece to the dress, and fasten them down with bows of ribbon. Or if preferred, two straight strips of the material two inches wide, and cut selvage way, can be fastened upon the ends of the square from *E* to *F*, and these can be made to meet the band at the back. Fig. 5 is a representation of the German Housewife's Apron as seen from the side.

A very pretty and becoming apron may also be made in a few minutes out of one large square handkerchief. Its arrangement will be seen in Fig. 6. The topmost corner is pinned to the dress



Fig. 6.

and fastened with a bow (*A*). The material is gathered at a depth of four or five inches from the top to make the waist, as at *B*. A piece of ribbon is attached to the two corners *C D*, by means of which the apron is tied back. Fig. 7 shows the appearance of this apron when in wear.



Fig. 7

Children's Pinafores are made in various ways, and the patterns which might be given for them are innumerable. Sometimes they consist of a plain depth of diaper, muslin, holland, or fancy

print, hemmed at the bottom and sides and round the neck, where a string is run in, and with slits

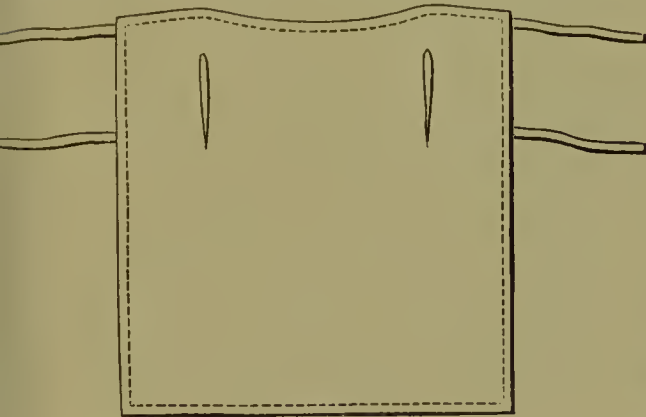


Fig. 8.

for arm-holes also hemmed, as in Fig. 8. This pattern is very easily made.

Fig. 9 is another very simple pinafore. It consists of two breadths of fine book-muslin, sloped like

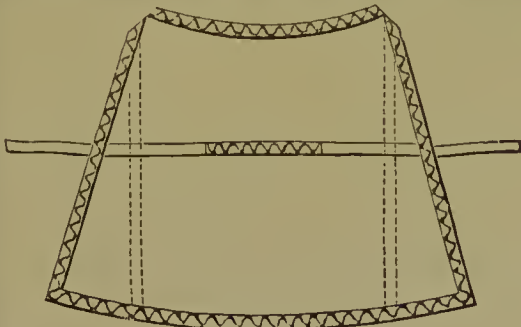


Fig. 9.

Fig. 10. These are wide enough at the top to cover the front and back of the body at the neck respectively. Each piece is trimmed all round with insertion lace, an inch or an inch and a half wide,

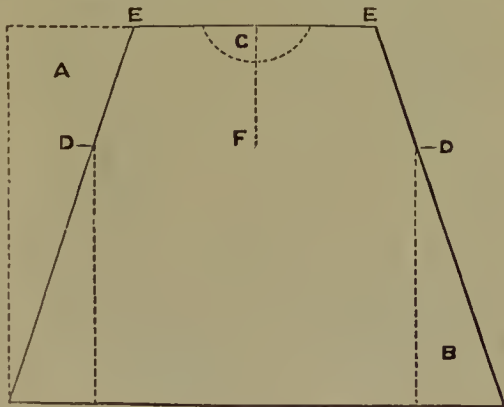


Fig. 10.

and run on over some pretty bright-coloured satin ribbon. The two breadths are joined on the shoulders only, and hollowed out nicely at the neck, as in

Fig. 9. In front a band is put, and a satin ribbon run in, which lies behind, and this also is shown in

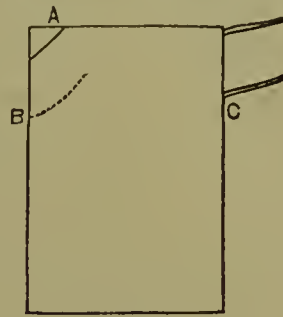


Fig. 11.

Fig. 9. Instead of ribbon, coloured muslin can be run in under the lace, and it can be washed with the garment.

Another very simply made pinafore for a little child is cut as in Fig. 11. A piece of diaper may be folded in half lengthwise, and then in half again lengthwise, taking from the second folds a slope off the top at A for the shoulders to be run and felled together, and a circular slope at B to form an arm-hole and epaulette, with the narrowest hem possible, the epaulette being hemmed with muslin-work. At the top a wide hem and a string to draw, a hem at the sides and bottom, and a second pair of strings complete the garment.

Fig. 12 is an easily made pinafore, suitable for

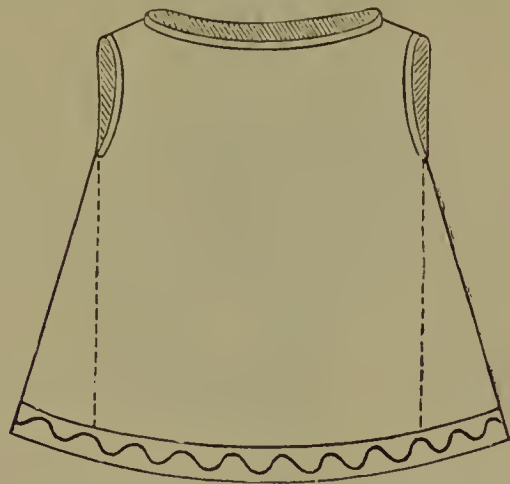


Fig. 12.

young children of both sexes. The way to cut and make it is evident from the illustration.

A pretty and simple bib-pinafore for a baby or a very young child may be made of linen diaper or of muslin as follows:—Cut a piece of diaper, about ten inches deep and twelve inches across at the widest part, the shape of Fig. 13. This is for the front of the pinafore. Cut two other pieces, eight inches deep and six inches across at the widest part,

to form the back (Fig. 14). Join the shoulders from A to B; then hem the rest of the garment all round; trim it prettily with lace, and ornament it with feather-stitch, worked in fine crochet cotton. Put a

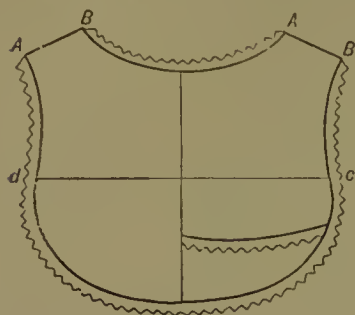


Fig. 13.



Fig. 14.

running string into the neck, and also all round the pinafore back and front, from C to D. Fig. 15 shows the pinafore in wear.

A very useful pinafore to cover the dress entirely, made of brown holland, of light-printed calico,



Fig. 15.

or of any washing material, can be made as follows:—Cut the back and front of the pinafore the shape of Fig. 10. Should the material not be wide enough, the back and front must be gored, or rather what is sloped off the side A can be used to form the gore B. Slope out the neck by the dotted line C, sloping the front an inch lower than the back. Supposing the gores have been run and felled on, and the seams at the side run and felled as far as D D from the bottom, cut open the tops of the shoulders

from E to E. Here a shoulder-piece may be inserted; cut this in four pieces, two for each side, like Fig. 16.

Pipe one of them, and stitch it from A to B, Fig. 16, into the shoulder at C to E, Fig. 10; stitch both sides of the shoulder to it, placing the broad end where the sleeve will be, and the narrow end at the neck. Turn to the wrong side, and hem a second shoulder-piece on the wrong side of the first, as a lining to it. Hem it by the two sides A and B, as in Fig. 16, turning in a little first, and taking care that the stitches do not come through and show on the right side.

If preferred, these shoulder-pieces could be dispensed with, and the pinafore could be cut in a

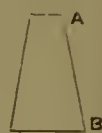


Fig. 16.

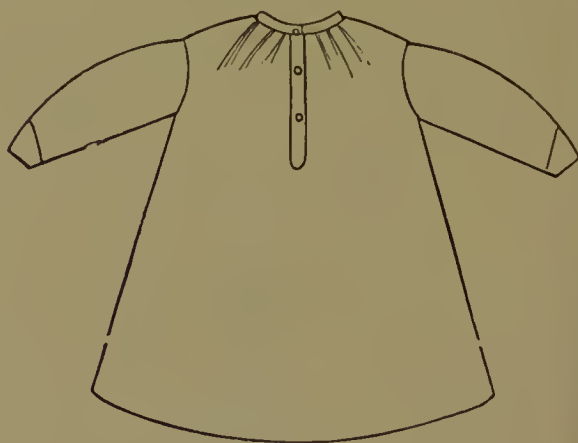


Fig. 17.

slanting direction from the neck to the top of the sleeve, to form the shoulder, as seen in Fig. 17.

Hem the skirt; cut the sleeves in one piece by Fig. 18, folding the stuff from A to B on the cross. The top should be as large round as the arm-hole, one side rounded, as shown in the diagram, and the other end sufficiently large to slip over the child's hand. The rounded top of the sleeve is put



Fig. 18.

in the front of the body; a place is left open for the arm-holes, and may be slightly rounded. Pipe it and stitch the sleeve in. Set the wrist into a straight cuff. Cut down the front of the pinafore from C to E in Fig. 10—that is, almost to the waist. Make a narrow hem one side, turn in the selvage on the other side, and put a piece of stuff piped round over it, like Fig. 19; back this first, then stitch it on across at the waist. Next put the neck into a band long

enough to go round easily and button an inch over. The pinafore must be slightly frilled into this. When complete, this band should be half an inch wide.

With this pinafore a belt and sash is worn hooked behind. The piece round the waist is one strip, cut selvage way, piped and lined with a second strip cut in the same way, and hemmed to it. The belt is furnished with a large button, and bows and ends are placed behind. If preferred, instead of a belt, a sash of the material of which the pinafore is made may be used to tie round the waist, and tie in a large handsome bow behind. This sash would be cut selvage way, twelve inches wide and two yards long. It would simply need to be hemmed all round, and cut slantwise at the ends.

Fig. 19.

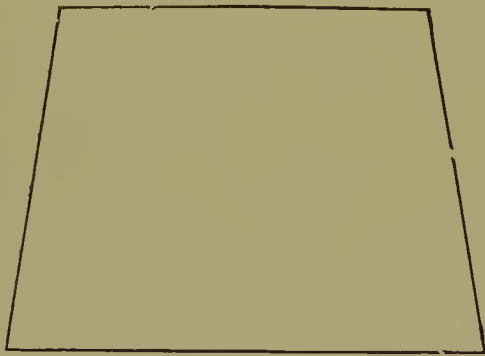


Fig. 20.

Fig. 17 shows this garment complete, without sash, belt, or trimming. The neck, front, and cuffs might be trimmed according to taste. A pinafore of this



Fig. 21.

shape is useful, as it entirely preserves the dress, and in hot weather it might be used instead of the dress.

Fig. 21 gives the back and front view of another

pretty fancy pinafore, patterns for which can be obtained from Messrs. Butterick, of Regent Street. It is in five portions: front, back, and three waist-pieces. For a child of four or five the front and back should be about a yard wide, and should be slightly shaped as in Fig. 20. Of the waist-pieces,



Fig. 22.

Fig. 22 is the front, and Fig. 23 the two backs as seen when buttoned. The front and back are to be

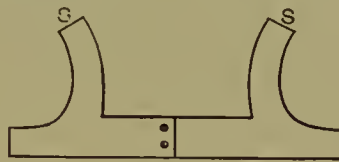


Fig. 23.

gathered into the waists, which should be double; the sides joined together, the shoulders also joined, and a little lace put into the sleeves. A broad piece of ribbon let in at the sides, and tied at the back like a sash, will be an improvement to this pinafore.

A quickly made pinafore suitable for slipping on at meal-times may be produced by cutting a shape of

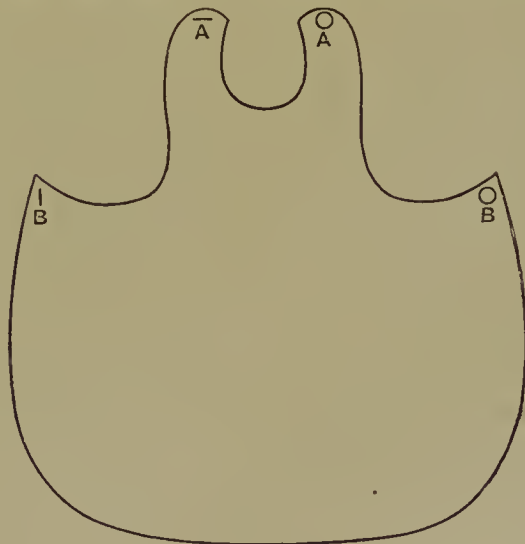


Fig. 24.

suitable dimensions, like Fig. 24, in print or holland, something like an enlarged bib. This pinafore needs simply to be bound all round with braid, then fastened with button and button-hole at A A, and also at B B. When made of holland or linen toweling, the pinafore will look smart if bound with scarlet or blue braid.

THE MANAGEMENT OF THE INCOME.

THE successful management of the income is the basis of all good housekeeping. Householders who fail with regard to money matters, fail in everything. They may have a well-furnished house; they may bring up their children healthily and sensibly; they may dress comfortably and elegantly; their food may be wisely chosen and excellently cooked; their servants may be competent and contented; yet all these advantages will lead to ruin if difficulties concerning money hold the field.

This being so, the question "How may householders best manage their income?" becomes a very interesting one. A good many householders think it is also a very useless one. They have long since given up the matter in despair. They find themselves face to face with necessities which must be supplied; they have houses for which they must pay rent and taxes; children who must be educated, clothed, and fed, and who no sooner seem to be supplied with one thing than they want another; servants who make unreasonable demands, and who seem to care nothing how food is wasted, or how property is allowed to go to ruin, so long as they spare themselves trouble; their tradesmen appear to regard them as prey to be fleeced and taken advantage of at every turn; and the only condition which never alters with them is that their means are not sufficient for their needs. "What is the good of theorising?" these people ask. "To be short of money is a hard fact from which there is no escape. It is impossible to do more than be as careful as one can; to spend nothing more than can be helped; and to go without on every available occasion. It is true that a life of this sort is very miserable; it puts the sun out of the sky most effectually; but it has to be endured by thousands; and therefore it is best to say nothing about it. If schemes about the management of the income took the form of an addition to the income, there would be some sense in them. A little more money than we now have is what is wanted to set us free, and management that falls short of that is not worth very much."

To an extent, all this is true. There are numbers of householders now living who would be much happier than they are, and would lead more self-respecting and respected lives, if they had just a little more money than they now have. Any honest industry or enterprise, therefore, that leads to this result is to be encouraged. Yet the pity of it is that the majority of those who are thus situated never will be any richer. The chances of life are against them. The only hope they have, therefore, is that they should learn how to manage their income; for there is no doubt that if they do not

accomplish this feat, their position will gradually grow worse.

There is something almost cruel in the way in which people who have once got on the wrong side in pecuniary affairs go further and further astray. People who are in debt meet a dun at every street-corner. Demands crowd upon the man who lacks ready cash, whereas the man who has money in his pocket finds every one ready to trust him. This is a reason why it is most advisable that the householder who is in difficulties should make a stand, and see whether or not he cannot manage his income more successfully. Undoubtedly, if he does not, the probability is that his difficulties will overwhelm him, and that life will scarcely be worth living. Let it be understood, therefore, that for a householder thus situated, good management is what is specially wanted. The householder needs to take hold of his income, and deal with it; master its details, and make it yield all it ought to do. If he could accomplish this, his life would be quite another thing. Servants would become manageable; tradespeople reasonable; children's wants would be satisfied; the sun would seem to shine once more. For, after all, it is not how much we have, but whether or not we make the money that we have, do, that determines our condition. Mr. Micawber was quite right when he said, "If a man have twenty pounds a year for his income, and spends nineteen pounds nineteen shillings and sixpence, he may be happy; but if he spends twenty pounds one, he will be miserable." The humblest scheme, therefore, that helps him to good management is worth attention.

Bad and Good Management.—Speaking of this same "management," it may be well to call to mind some remarks made about it by an able writer on social subjects, Miss Barnett, lecturer to the National Health Society. Miss Barnett says:—

"When we see two persons with the same income, the one always ready with money for necessities, or pleasures, or charities, and the other continually on the verge of destitution, we are apt to explain the difference by remarking that the former is a 'good manager;' and by leaving it to be supposed that there is some quality inherent in a certain proportion of the human race, that makes its money extend over a greater surface than its neighbours. We are told that such-and-such women are 'bad managers,' and will always remain so; it is hopeless to attempt any reform. Certainly, the capacity possessed by some for spending large sums of money, yet having absolutely nothing to show for them, is so remarkable that it almost seems to point to an unusual gift.

Fifty pounds is gone in a year from the possession of a person to whom fifty pounds is a matter of importance, and in its place there are not even the common necessities of wearing apparel, no railway journeys have been taken, no friend is the richer for a present, not a shilling has gone in charity; in fact, the matter passes every one's comprehension. It passes ours also. We have known more than one such case, but never have been able to understand them.

"Good managers to us, however, mean generally people who have learnt how to go without, and who know what to go without. This faculty comes neither by chance nor by nature. It is natural to all persons to possess themselves of everything that they see that takes their fancy. Whoever heard of a provident savage? Thinking of the discomfort entailed by the want of good management, it is reasonable that we should cease to consider as venial offenders the persons who are incapable of limiting their expenditure to their income. There is, however, a too common confusion between liberality and outstepping one's income, between parsimony and keeping within it. Yet to spend more than one's income is to spend money that belongs to others; and it is not remarkably liberal to give away other people's goods. It is like the tender-hearted gentleman who was so deeply moved by an eloquent charity-sermon that he picked his neighbour's pocket, and laid the purse in the plate."

Difficulties arising from want of money are the harder to bear because they excite so little sympathy. If our loved ones are removed from us by death, or if we break a leg or an arm, our friends and acquaintance pity us, and do what they can to help us. But if our means are limited, and we are constantly compelled to deny ourselves on this account, the world avoids and sometimes despises us. Yet few choose poverty as their portion; the majority would be rich if they could.

Nevertheless, the world is not as much to blame as at first sight it appears to be. As a rule, success is a sign of power. The people who succeed pecuniarily are the people who have thrift, self-command, foresight, determination, strength of character, and the faculty of looking ahead; in short, they are the people who have the capacity to manage their income; and these qualities the world has pronounced to be admirable. The people who fail are the thriftless people, who let things slide, and take what comes without daring to deal with it. This temper the world has decided to despise; and therefore it is only acting up to its conviction when it flatters and courts the successful, and scorns and tramples on the unsuccessful.

Nor does it by any means follow that an addition

to the income would be certain to put right the individual who cannot manage on the present income. It is a strange thing that the amount of income possessed has very little to do with its successful management. For the most part, the people who get into money troubles would be in just the same trouble if their means were doubled or trebled. They would not perhaps suffer so grievously, but their failure would be even greater than now. The fact is that failure in managing the income is usually the result of muddling. People do not look far enough ahead; they do not portion out their income; they do not allot its due proportion to each item of expense; they think that economy is nothing but sparing and saving, whereas it is wise sparing and also wise spending. If they would boldly raise the veil which hides their true position from themselves, face the light, and realise exactly where they are, they would at least give themselves the chance to manage their income. We ought to understand that management of the income consists in calculation, in measurement, and in seeing that expenditure is abundantly covered by income. A wise woman once said, "You talk about making both ends meet. My idea of good management is that they should tie in a handsome bow." The handsome bow is seldom possible; but simple honesty requires that the ends shall meet, and that we should "pay for everything we get, and not get till we can pay."

There is one consolation for those who feel compelled to face the problem of managing their income; it is that the majority of people are in a similar case with themselves. There are few people in this world who feel that they have enough for their needs; and no matter how poor we are, our poverty would seem abundance to some less fortunately placed than ourselves. In the autobiography of Franklin we read that when the philosopher was a young man his father one day said to him, "Remember that there is scarcely a person whom you meet who is as rich as he seems to be." Franklin bore this in mind, and it took away from him the desire to seem to be what he was not. It is the miserable pretending of £200 to seem £300, of £300 to seem £500, and of £500 to seem £1,000, which too frequently interferes with the successful management of the income in England. If we would take facts as they are, and make the most of the money we have, there would be happiness and independence in many a household where now there are anxiety and discontent.

One advantage associated with the honest endeavour to form a scheme for the management of the income is that it gives room for hope that the householders who adopt it, abide by it, and find it a success, will be able to lay the subject down and have done

with it. There is a wonderful difference between living *to* make both ends meet, and living *and* making both ends meet. The worst of money troubles is that where they exist it is impossible for their victim to avail himself of the elevating and refining influences of life. To benefit by these influences, a man must have an easy mind; yet to imagine that an individual can have an easy mind who is in a constant state of unrest about unpaid bills is an absurdity. How can the householder who is continually uneasy for want of money devote himself to the study of good books, or try to learn the lessons which the artist or the poet has to teach him? His energies must be entirely expended in keeping the wolf from the door. If he could free himself from the burden that now oppresses him he might, indeed, do wonders; while if he could so order his incomings and outgoings that he could "stir himself at ease," to use Mr. Carlyle's expression, he might increase both his happiness and his usefulness.

This expression of Mr. Carlyle's was used in connection with an incident of his life that is worth remembering. Every reader of Mr. Froude's biography knows that the great philosopher was for many years very much hampered for want of money. He wrote wonderful books for which publishers did not care to give a high price, and he was for some time very anxious and uneasy. After a while he became more successful; and one of the first things he did after success visited him was to send his mother a present of money. With the money was a letter, which directed that various articles should be bought which Mr. Carlyle knew to be needed; and after these things were detailed came the following words:—"Over and above, dear mother, get yourself something you wished to get—a little keg of beer, a little this, a little that. Stir yourself more at ease than you would have done; it will be my greatest luxury." It was very beautiful to find that the son considered it a luxury for the mother to "stir at ease." There is no doubt that the mother would feel as her son did. Indeed, to stir at ease in money matters is a luxury, and one which can be properly appreciated by those only whose lives have been cribbed, cabined, and confined through being short of money. There are individuals who profess to despise money; but they forget that, to quote the words of a wise man, "the care of money means the care of the instrument that produces some of the best ends of life."

A Household Budget.—From all this it follows that it is a mistake to say that theories about managing the income are foolish and vain. Undoubtedly, schemes for laying out every income according to a set rule, regardless of the

numbers, habits, tastes, and characters of the persons concerned, are ridiculous; but it is not ridiculous to try to order the expenditure wisely, so that it shall come well within the income, and so that the various details shall be dealt with in due proportion, according to their importance. Wise expenditure of this kind is impossible for none, excepting for those who do not know exactly where they are, and who spend and spare by fits and starts, instead of doing it systematically, according to a plan, and with a fixed purpose. A plan is the outcome of a theory, and therefore theories are by no means to be despised.

It must, however, by no means be forgotten that before it will be possible to manage the income wisely, it will be necessary that the householder should first of all ascertain what his position is with regard both to means and needs; and, secondly, that he should map out a plan according to which the expenditure shall come well within the means. After this, if he keep well within the plan, all will go smoothly.

The householder who desires to ascertain his position may do so by drawing up a sort of budget of receipts and expenses for a certain limited period—say, three months, six months, or a year. If he wishes to do the business methodically, he should take a piece of paper, and on the left-hand side set down all the sums of money he expects to receive during the period referred to. If there is a fixed income, and this is paid at regular intervals, it is a simple business to set down the receipts thus. The chief difficulty arises when the income is fluctuating, as is so often the case. The only safe plan then is to take an average of income, and count only on the lowest sum likely to be available during the period. In money matters it is always wise to prepare for the worst. We may hope for the best, but we should never draw a bill on our expectations.

Having ascertained what is our income, we next proceed to estimate our expenditure. This calculation should be written on the right-hand side of the sheet of paper. It will be more detailed than the other; but the great thing is to make it as accurate as possible. To this end everything must be set down—rent, taxes, coal, gas, dress, wages, food, education, laundry, pleasures, medical attendance, and travelling expenses; in short, all the varied items which go to make up that complicated term "Household Expenses." The drawing up of this list will take time, without doubt; for a calculation of this kind is nothing if not complete. If thoroughly done, however, it will be of the greatest value; and even when it has answered its immediate purpose, it should be carefully preserved for comparison with future budgets.

Having thus written down every probable item of income on one side of the sheet, and every detail of expense that is likely to occur on the other, the next business must be to add up the two lists and see to what sums they amount. From the juxtaposition of these two accounts we learn exactly where we are in money affairs. If our estimates are correct, and if the sum of our income exceeds the sum of our expenditure, we are living within our means. We may not be spending our money wisely; we may not be doing the best for ourselves and for those who are dependent on us; but at least we are not running into debt; we can look our creditors in the face, and feel that we are paying our way honestly. But if, on the other hand, the sum of our expenditure exceeds the sum of our income, we are in a bad way; and our expenditure *must* be reduced, and that without any delay, for, unless this is done, persistence will lead to disaster. Where retrenchment can most easily be made will be a subject for future consideration; but that it must be made *some-where*, is unquestionable.

A household budget of the sort described is of the greatest value to any one who wishes to manage the income. It should be drawn up anew frequently, whenever changing circumstances render a change of plan necessary. It will serve as a sort of chart to guide the housekeeper through the dark and devious ways of temptation to needless expense.

When the actual monetary position is ascertained, the first thing to do is to determine how the available income shall be laid out to the best advantage, and what proportion thereof shall be devoted to each item. It is to be noted that no matter how much or how little the income may be, experience has taught that the same proportions may usually be maintained in all. When this fact is forgotten, we generally find that the people who can least afford to do so, pay the largest proportion for special requirements. The following is the division here recommended. It will be noted that by way of simplifying matters the income has been divided into sixteenths:—

Rent one-eighth, or	-	-	-	-	-	2/16
Rates, Taxes, and Railway Fares	-	-	-	-	-	1/16
Household Expenses, one-half the income	-	-	-	-	-	8/16
Clothing and Charity	-	-	-	-	-	2/16
Education, Books, and Stationery	-	-	-	-	-	1/16
Insurance, Doctor's Bills, and Saving	-	-	-	-	-	2/16

It is believed that in the majority of cases this division can be maintained roughly (though not strictly), with a fair hope of safety and satisfaction.

Rent.—The first item to be considered here is rent. In former times, when rents were not so high as they now are, it used to be an understood thing

that, when householders were prudent, rent must not exceed one-tenth of the income; and an individual who was known to be living in a house of which the rent exceeded this limit, was looked upon by his neighbours as unthrifty and extravagant. The limit was a wise one, yet householders have had to give it up. They found that, in taking a house, rent was not the only consideration. Convenience of situation, the size of the house or of the apartments, and sanitary conditions, were details which made a house advantageous or otherwise, apart from its price; and these details could not be forgotten. Moreover, houses at a distance from the busiest districts were cheaper than houses in the heart of a city; yet before they could be called inexpensive the cost of locomotion had to be calculated, and this added to the rent. Householders who had large families also found it incumbent upon them to provide sufficient room for all; for if the house was overcrowded, health was injured, and no economy was to be found here. When the rule was laid down that one-tenth of the income only was to be spent upon rent, it followed that if the income was £1 10s. a week, the sum paid for rent ought not to exceed 3s. a week; if the income was £300 a year, the rent ought not to exceed £30 a year. Now in country places a cottage with a good piece of garden could frequently be had for one or two shillings a week for the labouring man, while for the householder who had £300 a year, a house of £30 rental was altogether unsuitable. Yet in large towns, where rents were high, even people who had 30s. a week could not get decent rooms for 3s. a week to be near their work; and they felt justified in paying more than this, in order to be comfortably housed. The consequence of these varying experiences has been that the rule that "the rent of a house must not exceed one-tenth of the income" has been more honoured in the breach than in the observance.

The rule may be disregarded, yet nevertheless it should be remembered. It was a wise one; and the nearer householders can approximate to it, the more likely they are to succeed in managing a small income. There is nothing which makes the management of the income more difficult than the fact that the householder is living in a house the rent of which is high in proportion to the means. The amount of rent paid influences not only the rates and taxes, but also the style of living. More is expected and more is required of people who live in a high-rented house than of people who live in a low-rented one; and, strange to say, higher prices are often charged to those who live in an expensive house in an expensive neighbourhood, than would be thought of if the same persons were living in a more modest domicile. Consequently, the first thing which has to be done

by those who wish to live within the income is to refuse to exceed reasonable limits in the matter of rent. If it is found to be impossible that the rent should not exceed one-tenth of the income, it should at least be insisted on that it should not exceed one-eighth.

One reason why so many householders pay a rent higher than is consistent with prudence, is that the majority of those who take up seriously the subject of the management of the income, find that for them the amount of rent to be paid is a matter already determined; they are settled in a house, they are paying a certain rent, and to move and take up their abode elsewhere would involve greater expense than to remain where they are. Under these circumstances the householder is wise who makes the best of things as they are. Individuals who discuss the subject of the management of the income, too often speak as if the only householders interested in the topic were newly married couples with a fixed income, which they can lay out as they please, and with everything straight and new before them. But this is by no means the case. On the contrary, the householders who wish to master the problem of how to make income cover expenditure, are for the most part persons who have realised its difficulties, and who find themselves face to face with claims which their income does not under present arrangements cover. For persons thus situated the proportion of income which ought to be devoted to particular expenses is a very serious one, and the income cannot be wisely divided without alterations in the style of living, which are difficult to accomplish. Nevertheless the attempt ought to be made. If it is discovered that rent exceeds its due proportion, the excess will either have to be done away with, or the sum will have to be furnished out of some other item.

It has been said that the amount of rent paid influences the amount of the rates, taxes, and style of living; it may be added that it frequently affects also the sum which has to be paid for travelling expenses. In large towns especially, houses situated in the suburbs are rented lower than are houses situated in the heart of the town itself, and consequently the cost of locomotion for fathers who have to go to and from business, and children who have to go to and from school, is serious.

Household Expenses.—The item which has next to be taken up after rent, taxes, and railway fares, is household expenses, and to this it will be seen that in the ideal scheme one-half or eight-sixteenths of the income is devoted. This will seem to many an undue proportion; yet householders of experience will scarcely pronounce such a judgment.

They will understand that the term "household expenses" is a very comprehensive one; it includes all the expenses which go to maintain the household as a household; such as the cost of food, coal, gas, servants' wages, laundry, repairs, and that non-descript series of incidental expenses which vary according to the character and habits of the heads of the household, and which embrace amusements, holidays, company, and postage. Household expenses are, indeed, more a matter of choice than any other, and they increase or diminish with the capacity and the ideas of the spenders. Householders have the reputation of being extravagant or thrifty according to the manner in which they deal with these expenses. When expenditure has to be curtailed, it is generally these amounts which are first reduced; and when expenditure is liberal, the liberality is first felt here. Yet, curiously enough, householders who refuse to acknowledge the necessity of all these expenses, generally pay more in the long run, and indirectly, than do those who look at them fairly and deal with them reasonably. Reasonableness with regard to them is therefore an economy.

The want of reason concerning household expenses shows itself in treating them as if they were optional rather than necessary, and by acting as if they could be ignored with impunity. Thus it is quite usual to find the bread-winners of a household giving way to bad temper and discontent about household expenses, as if their presence or absence depended on the good or bad management of the housekeeper. When husbands refuse to believe that if a sufficiency of food of good quality is not forthcoming the health of the family will suffer, they forget that "health is the first wealth," and that diminished health involves the incalculable expense of medical attendance, and diminished energy for work. When mothers try to save expense by buying cheap clothes or utensils for cheapness' sake, they forget that the cheap things cost more actually, though not immediately, than do the higher-priced goods which they discard on account of their cost. When housekeepers buy necessities in small quantities and at retail prices, they forget that if they would buy in large quantities at wholesale prices they might positively save money; and when they refuse to realise that as the family enlarges (through additional children being born and other causes) the expenses *must* increase, they are simply trying to accomplish the impossible—that is, to make a sum which was sufficient only for small needs cover large needs. Concerning household expenses, it saves time, trouble, and worry if householders will understand that they never get anything for nothing, and that if they will not pay what is meet

in one way they will have to do it in another. All experience has proved again and again, that the half of the income which has here been set down is a very fair proportion to devote to household or living expenses.

Dress.—The two-sixteenths of the income apportioned to dress will perhaps be pronounced too much by householders who under-estimate the value of dress, and too little by those who over-estimate it. It is, indeed, most unusual to meet with people who look at dress reasonably. Dress is important, but it is not all-important. The wearing of suitable dress—warm for winter, cool for summer—affects health; the wearing of tasteful and becoming dress affects reputation. Economical housekeepers who despise appearances, and go shabby to save their purses, very often suffer actual loss far exceeding the amount saved, through missing the respect and attention which would have been paid to them if they had been more “respectably” apparelled. Moralists and writers of story-books very often try to spread the idea, that dress is a trifle which the wise and good can afford to despise. If in this nineteenth century the idea is acted upon, then these wise and good people will take a back place. The householder must have very fine manners and very great talent if he intends to disregard dress. As the great American philosopher Emerson says:—

“I would remind the young that some people need dress, and others need it not. A king or a general does not need a fine coat; and a commanding person may save himself all solicitude on that point. If a man have manners and talent, he may dress roughly and carelessly. If the intellect were always awake, and every noble sentiment, a man might go in huckaback or mats, and his dress would be admired and imitated. Remember George Herbert’s maxim, ‘This coat with my discretion will be brave.’ If, however, a man has not firm nerves, and has keen sensibility, it is perhaps a wise economy to go to a good shop and dress himself irreproachably. He can then dismiss all care from his mind. I have heard with admiring submission the experience of the lady who declared that ‘the sense of being perfectly well dressed gives a feeling of inward tranquillity which religion is powerless to bestow.’”

If there is one member of the household who more than all the rest would find it “a wise economy to go to a good shop and dress himself irreproachably,” it is the bread-winner thereof. Members of the family who live at home, and who associate only with those who know them, and, we will hope, love them, can afford to be content with knowing that their attire is healthful and neat, if what is desirable beyond this cannot be supplied without anxiety.

But a man who has to consort with strangers, who judge of him by appearance, and who most likely do not look below the surface, cannot afford to do this. He must make an effort to appear at his best, or he is sure to suffer. There are men who have lost chances of which they never knew through occasional shabbiness. Irreproachable attire with nothing behind it is a poor thing; but irreproachable attire which makes a good impression, and prepares the way for what is behind, is not to be despised. Housewives, therefore, who wish to help their husbands to win success, will take pains to send them out neatly and suitably dressed; and they will not consider the outlay necessary to secure this result either unimportant or wasteful. To do them justice, housewives seldom fail in this duty. They love to see their husbands look well, and willingly make sacrifices for their benefit. It may be a satisfaction to wives who have done this to know, that outsiders of experience believe that the game is worth the candle.

Charity.—Out of the amount set apart for clothing, however, the sum devoted to charity has to be deducted. Householders whose means are very much limited, and who have to contrive in every way before they can make income cover expenditure, will perhaps say and think that they are not called upon to spend money in charity. Others there are who will say that money spent in charity is generally money thrown away; that it does more harm than good. In answer to the first objection we would observe that no one has a right to live to himself; and that the people who try to live to themselves injure themselves more than any one, because they grow mean, small, and narrow, and gradually lose the power of seeing what is highest and best. There is no one so poor that he cannot help others; and the will to give grows with the practice of giving, just as the will to withhold grows with the practice of withholding. Yet it is more blessed to give than to receive; and it would be but a poor end to economy and scheming that left a man all alone, without friends and lovers to smile when they spoke his name.

In the second objection there is a good deal of truth. The best givers in these days are the men who give, not money only or chiefly, but time, labour, brain, and sympathy. Yet to make use of these best gifts a little money is needed; and therefore, in drawing up an estimate of probable expenses, a charitable person must on no account omit to put down a certain sum for charity.

Education.—The sum devoted to the cost of education will, of course, vary with the number of

children to be educated. Householders who are parents will, however, in these days scarcely feel that they have done their duty by their children if they fail to give them a good education. Every day the need of education is more imperatively felt; for it is seen that education is the instrument by means of which young people are prepared for usefulness and happiness; and that if this instrument is not supplied, the probability is that in the future the children will go to the wall. Fortunately, it is now very much easier than it used to be for parents to get their children well educated; and every year facilities in this direction are increased. Board schools, high schools, colleges, technical education classes, University extension associations, home-reading circles, and similar institutions, are rising on every side; and there is hope that before very long a thorough education will be within the reach of all. Moreover, for children who show signs of special talent or industry there are prizes, scholarships, and exhibitions awarded, which very considerably relieve the parent who is on the look-out to place his child where he will be in the way of such things, of a part of the cost of education. At one time, prizes of this kind were open to the rich only; now they are being put where any one can reach them who has the ability and the determination to win them.

Even where prizes and exhibitions are available, the education of children is an expense, on account of books and extras which have to be purchased. Indeed, it may be said that when exhibitions are obtained, expenses are increased, because the idea of what is necessary in education grows with what it feeds on, so that the parents of children who win prizes have more extended notions of what education ought to include, than have the parents of children not given to study. As, however, the willingness to pay for education increases with the appreciation for it, this does not very much signify.

Some fathers and mothers there are who think it is very hard that they should be compelled to pay for their children's schooling, and also that they should have to keep their children at school for a certain length of time, thus losing the benefit of their earnings. These parents do not see that without education their children will be most heavily weighted, and will be quite unfitted to run the race of life. The great Italian patriot Mazzini once said when addressing some workmen:—

"Your liberty, your rights, your emancipation from every injustice in your social position, the task which each of you is bound to fulfil on earth—all these depend upon the degree of education you are able to attain.

"Without education you are incapable of rightly

choosing between good and evil; you cannot acquire a true knowledge of your rights; you cannot attain that participation in political life without which your complete social emancipation is impossible; you cannot arrive at a correct definition and comprehension of your own mission. Education is the bread of the soul."

Besides, these fathers and mothers ought to remember that though we English think we make many sacrifices to give our children education, we do not really educate them as well as parents do in other countries; for example, in Germany and in America. This is a fact, unwilling though we may be to believe it; and the consequence will be that, if we do not mind, Germany and America will beat England in doing the world's work. Already these countries press us very hard, and, much as we think of ourselves, ignorant or half-educated Englishmen will not be able to compete with well-educated foreigners. While we are constantly grudging the cost of education, the Germans have a proverb which they always act on, to the effect that "the best is only just good enough for the schools." In the long run these two policies will tell.

Books.—That there is need for outlay upon the education of their children few parents will deny, yet it is to be feared that there are many who will think that to pay money for books, and for the means of the cultivation of the mind of the family generally, are very unnecessary items of expense. Yet it is astonishing how people's ideas differ on this point. A great scholar, Mark Pattison, once said that a man making £1,000 a year, who spent less than £1 a week on books, ought to be ashamed of himself. One pound a week is £52 a year, or, to put it roughly, a twentieth of the income for books alone. There are few householders who spend as much as this on books.

The words of another great teacher, Mr. Ruskin, when speaking of the cost of books, and of the unwillingness of English householders to spend money upon them, are also worth quoting. He says: "What do we as a nation care about books? How much do you think we spend altogether on our libraries, public or private, as compared with what we spend on our horses? If a man spends lavishly on his library, you call him mad—a biblio-maniac. But you never call any one a horse-maniac, though men ruin themselves every day by their horses, and you do not hear of people ruining themselves by their books.

"Or, to go lower still, how much do you think the contents of the book-shelves of the United Kingdom, public and private, would fetch, as compared with the contents of its wine-cellars? What position

would its expenditure on literature take as compared with its expenditure on luxurious eating? We talk of food for the mind as of food for the body; now a good book contains such food inexhaustibly. It is a provision for life and for the best part of us; yet how long most people would look at the best book, before they would give the price of a large turbot for it! Though there have been men who have pinched their stomachs and bared their backs to buy a book, whose libraries were cheaper to them, I think, in the end than most men's dinners are. We are few of us put to such trial, and more the pity; for, indeed, a precious thing is all the more precious to us if it has been won by work or economy. And if public libraries were half as costly as public dinners, or books cost the tenth part of what bracelets do, even foolish men and women might sometimes suspect there was good in reading, as well as in munching and sparkling; whereas the very cheapness of literature is making even wise people forget that if a book is worth reading, it is worth buying.

"No book is worth anything which is not worth *much*; nor is it serviceable until it has been read, and re-read, and loved and loved again; and marked so that you can refer to the passages you want in it as a soldier can seize the weapons he needs in an armoury, or a housewife bring the spice she needs from her store. Bread of flour is good; but there is bread, sweet as honey, if we would eat it, in a good book; and the family must be poor indeed which once in their lives cannot for such multipliable barley loaves pay their baker's bill."

Medical Attendance, Insurance, &c.—

The last item in our imaginary plan of expenditure is devoted to doctors' bills, insurance, and savings. With regard to doctors' bills we have to remember that people who order their expenditure wisely, know when to spend and when to spare, and how to spend and how to spare, are much more likely to keep well and so dispense with doctors' bills than are the people who are broken down with anxiety and worry. Healthy homes, suitable and comfortable clothing, and good food, are better than medicine, and they are all secured by good housekeeping.

It is said, and we find no difficulty in believing it, that in these days nervous disorders are very largely on the increase. People live too fast, and they live beyond their means; then they wear themselves out in trying to regain what they have lost. If they would plan out their income; be determined to *make* income cover expenditure; be content to do without things not really necessary, and to have what is really necessary, they would be happier, and stronger also, than they now are; and they would be taking the best means of lessening the doctors' bills.

Yet even these wise persons could not count upon abolishing doctors' bills altogether; for there are occasions in the life of every household when a doctor must be called in. By all means, therefore, let this expense be provided for, and let the doctors' bills be settled as soon as they are due, like all other bills.

There are householders, however, who seem to think that the settlement of a doctor's bill may be indefinitely postponed, and that "when convenient" is the right time for a doctor's claim to be met. Acting on this idea, they will let a doctor's bill run on from one year to another; and one reason why doctors' bills are regarded with so much dread by the thriftless is, that they are so seldom disposed of when small, but are allowed to grow until they assume serious dimensions. Apart from the imprudence of this proceeding, its injustice ought to be acknowledged. Professional men have to keep up a good appearance, or they lose caste; but their expenses are usually heavy, and they have to go through a long and costly preparatory course before they are qualified to practise. When their patients do not pay them regularly, they may endure grievous anxiety; and it may be that the householder who does not pay his doctor regularly, is producing in another man that strain upon the nerves which, through thrift and wise living, he hopes to avoid on his own account.

Then as to saving and insurance. Every one acknowledges the desirability of saving money—"putting by for a rainy day," as the saying is—yet it is astonishing how few people attempt to do it. To get on the right side of one's income, leave a little over and begin to save, is a fine experience. It gives a feeling of independence and courage which throws a gloss over the painful details of economy.

But what, it may be asked, is to be done in cases where the budget shows that expenditure exceeds income, and that, if disaster is to be avoided, *expenses must be curtailed*? This must form the subject of further consideration. Yet the chief thing which is necessary to secure it is to make a beginning. "It is the first step which is the difficult one." The householder, therefore, who through thrift and good fortune is able to begin to save, is starting on the road which leads to pecuniary ease. It signifies little that the savings first made are small; their most remarkable characteristic is that they are made at all. They are the first-fruits of good things to come, and they are big with promise for the future. To make a saving, again, is an indisputable sign of success. The mere existence of a surplus argues the successful formation of a plan of expenditure, and successful management of income.

There are in these days many ways in which

small savings can be guarded and put in the way of increase; but the particular way chosen must depend very much upon locality and private circumstances. Nevertheless, it cannot be too strongly insisted upon, that a high rate of interest generally means risk. The Post Office Savings Bank is much despised in certain quarters because it yields so little interest; but it is safe, and after all this is the chief advantage. When small savings have been

made with self-denial and persevering economy, it is very hard to lose everything through trying to grasp over-much. Yet this disaster has occurred again and again to most deserving householders: and the more inexperienced they are, the more likely are they to be led astray by vain promises. Before everything, therefore, the householder who has succeeded in effecting a saving should aim at putting his savings where they will be safe.

BEDROOM FURNITURE.

PERHAPS there is no department of the house in which modern and improved notions have made themselves more beneficially felt than in the bedrooms. Such heavy and, for the most part, shabby rooms they used to be, with the sarcophagus-like four-posters, the heavy wardrobes, and the sad-looking curtains; and too often the carpets that had done duty in the lower rooms till too much worn, were taken upstairs because the bedstead hid some of the shabbiness, and some other worn portions could in all probability be cut off. That was one extreme; and the other was the bare-boarded, clean-scrubbed room, with its bed-side carpets, and just a mat before the washing-stand, and a rug at the fireplace. They were terrible rooms, those old-fashioned ones, for any one to be ill in, for they were either stuffy or comfortless; and neither one nor the other tends to raise the spirits, or help the mind to assert itself over the weakness of the body.

Painted Floors.—In Belgium almost all bedroom floors are painted and varnished, but not so highly as to make them slippery. Perhaps it would be more exact to say that the boards are treated with at least three coats of good paint, and varnished when it is desired. Less than three coats would never stand the daily sponging and wiping dry which is the Low Country notion of keeping a bedroom floor clean. There is a bit of carpet by the side of the bed, and another, or a mat, before the dressing-table and washstand, but that is all.

That is an extreme, no doubt. But when we consider that more of our lives is spent in the bedroom than in any other single apartment of our dwelling, it must be manifest that all the sanitary advantages already pointed out as belonging to polished or painted floors, and loose rugs, or carpets, or matting laid upon them, belong to them in the bedroom in pre-eminent degree. There can be no doubt of this, and it only remains to secure, by the judicious use of mattings and rugs, and other loose coverings, a combination of healthiness with that appearance

of comfort which is so great a luxury in one's private apartment. The very last place for a fitted carpet is a bedroom.

Bedsteads.—The great improvement above all others has been the substitution of metal bedsteads for wooden ones. Let the latter be as well made and well seasoned as they might, they were full of cracks and crannies, in which unpleasant insects, if by any chance introduced, abode and multiplied in security. Our foremothers scarcely knew what these troubles were, unless they went to London, or a visitor came from thence to see them. No doubt all thickly populated towns were the same; but the name of London in olden days was somehow or other irrevocably associated with that of the insects now commonly called "B flats" or "Norfolk Howards;" and the strict surveillance which was exercised over luggage that came from the Great City was a most important article of the creed of those days. It was the law of most houses that no travelling-trunk ever went upstairs; the contents were carried up on trays and in baskets, and the receptacles were brushed and wiped out and consigned to a box-room, and this was one among many other precautions that kept the dreaded pests away. But railways have quite changed our national habits. We are for ever going about the world, rubbing shoulders with dirty folks as well as clean ones, occupying bedrooms in hotels and lodging-houses that are very much of the whited-sepulchre order; and consequently the housewife, finding the task of keeping her wooden bedsteads clean quite Herculean, has long ago given up the unequal warfare, and replaced them by metal ones.

Iron bedsteads are of many qualities, in order to suit all purses. The full-sized single black ones are very good for ordinary use, and substantial single brass ones look very nice indeed. A great number of cheap ones are painted green, and are easily treated with any of the now-fashionable enamels, so as to match the paint of a room.

The earlier brass bedsteads had a great deal of intricate ornamental work, especially at the foot, on which damp and dust settled, till the metal became quite discoloured; and as it was usually lacquered, it was difficult to clean. Makers are wiser now, and increase the handsomeness of their bedsteads by making the pillars more massive, the foot and head rails larger and heavier; these only require well

against which the head of the bedstead can most conveniently be placed, there are two wooden supports, into which some slight rods—such as are used for stair-rods—or gas-piping, can be inserted, so as to carry curtains sufficiently thick to shield from cold, or secure privacy when the door is opened. Even if suitable wooden uprights have to be put up and painted to match the room, the whole affair costs

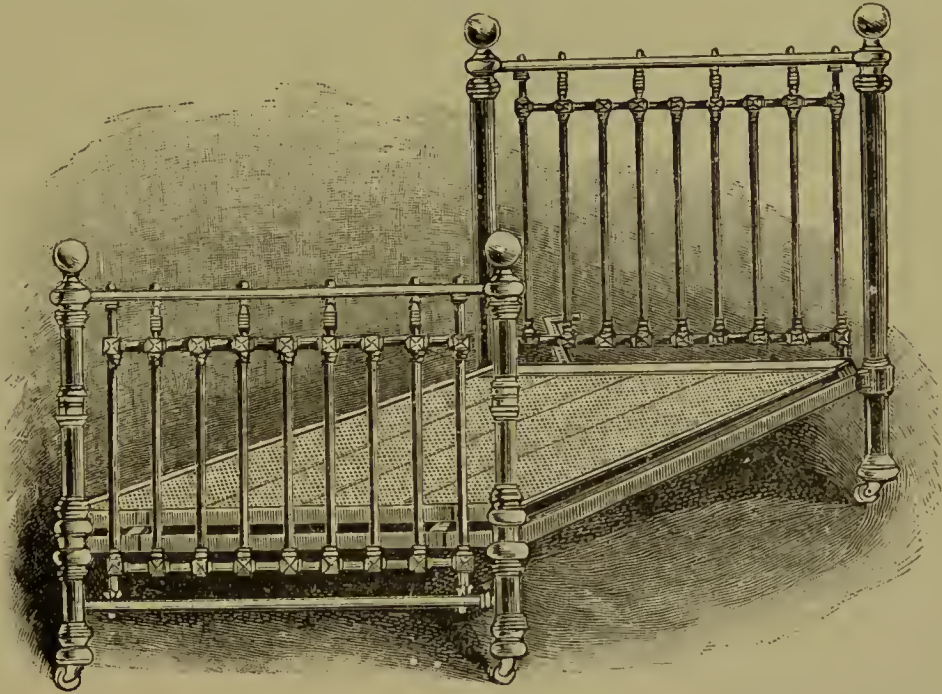


Fig. 1.

dusting, though if there should happen to be a little oil or kerosene on the duster it does them no harm.

Bed-Hangings.—Taking houses as they are, it is obvious that draughty rooms require many more curtains and screens than snug ones do; and, heterodox as it may sound, many bedrooms are scarcely habitable without some kind of bed-hangings. Bedsteads with the iron frames, or testers, or heads to support such hangings, are more expensive than those without; and this is an item to be taken into consideration when furnishing.

There are two modes of dispensing with these adjuncts to the bedstead, while providing for the comfort of hangings, and both depend to a certain extent on the amount of woodwork in the construction of the room. Very nice pretty hangings for modern French bedsteads, can be arranged by screwing a brass ring into the ceiling, through which a long length of trimmed drapery can be suspended; but it is absolutely necessary to discover a beam or rafter in that ceiling, to which to fasten the rings, as they will not hold securely in lath and plaster.

Another way is, to ascertain whether in the wall

less than the addition to the price of a bedstead caused by its tester.

Extremely nice double bedsteads of black-japanned iron, with brass rails, knobs, &c., may be bought at any good furnishing house for £3 10s. or a little less; and lighter ones, not so strong or substantial, for £2 10s. Occasionally from a country dealer a "sample" bedstead of exceptional value can be procured at these prices; and when that happens, it is a distinct advantage. It is quite advisable to have bedsteads good and heavy, and, of course, more expensive, but we have quoted low prices purposely.

Wire and Spring Mattresses.—There are a great many kinds of modern spring beds and mattresses. To some the disadvantage attaches that, while comfortable enough for one person, they are most uncomfortable for two. Those made with spiral coils of springs are rather apt to get out of order, but when in order are very comfortable, though now thought rather old-fashioned. Then there are patent galvanised steel-wire mattresses, usually sold with the bedstead (as in Fig. 1) complete. The *portatif élastique sommier* also has its adherents,

and it looks like parallel slats of wood, each one separately slung on springs.

The double-woven steel-wire mattresses are made of a sort of braided wires laid close together; and the chain spring mattresses are composed of chains stretched an inch or two apart, and crossed with sections at intervals, in which the wire seems to be wound on a succession of reels or spools. In measuring for them, the inside measurement of bedstead between pillars of head and foot rails should be given. The mattress termed "Excelsior" is of this last description, and the sections are supposed to prevent any sinking in the middle; they are fixed into pitch-pine frames with metallic ends that clip on to the bedstead. The "Eastern" is a woven wire mattress with patent frame that takes to pieces for removal, and there is a "tubular folding stretcher." It is said to make a comfortable bed even with a rug laid on it. The "Roman" mattresses have the "reels" only at either end, and the "Neptunes" are of woven wire, particularly suitable for "board ship."

The best palliasses are filled with clean wheat-straw, and no good firm likes to recommend any but the quality that begins at about 5s. for a narrow single bedstead.

Hair and Wool Mattresses.—Although spring and wire mattresses for beds are now all but universal, the majority of people like to supplement them with hair or wool mattresses. Hair is rather hard, but comfortable and healthy; and the best wool is very soft and nice. The wool, however, will not keep in place for ever, and the time will come when the mattress must be re-made. People within reach of shops will send the mattresses to them to undergo this process, and have new ticks, or the old ones washed and, if necessary, mended. But there are places remote from shops, and there are housekeepers who go out to our colonies, who must know how to do these things themselves, even if only in order to teach others. Choose an attic or a room that is not in general use; and after removing the little rounds of leather which keep the wool in its place, empty the whole contents of the mattress out on the floor. It will be seen that the wool has formed itself into lozenge-shaped lumps, and these must be picked apart with the fingers—a work of time and patience. The ticking must be washed, starched, and ironed, and the picked wool put back into it, laid on the floor, and packed as evenly all over as possible, and then the rounds of leather sewn in much as we have described in "Upholstery" for buttoning furniture, but not drawn so tightly. Unless the ticking to start with was a thoroughly good linen one, it will not be worth washing after a few years' use; and

the best plan will be to substitute a new cover of union ticking.

Beds and Pillows.—Comparatively few now use feather beds; but there are chilly mortals who esteem them cold-weather luxuries; and feathers and down make the only kinds of bolsters and pillows worth having. But they also from time to time require to be emptied out, all the feathers pulled apart, and putting either into new or washed ticks. The evil day may be long postponed if the beds, &c., are thoroughly well shaken and turned over, so as to prevent the feathers getting into lumps; but come it will in course of time. Whether the tick be brand-new or washed, it requires preparation on the wrong side before the feathers are put in; and if this is omitted, the small sharp points soon push themselves out in a manner that is most uncomfortable, and in process of time detracts much from the value of the bed or pillow. The tick must be laid inside-out on a table, and diligently rubbed all over, especially over the seams, with lump beeswax or yellow soap, of which a little does not go a very long way. The operation requires a strong pair of arms; but when well coated, the ticking is impervious, and it will be a long, long while before any feathers find their way out.

Flock is sometimes used for beds, and often for pillows, especially for children and servants—no doubt on the hypothesis that healthy young people can sleep anyhow. In reality, however, a flock pillow is about as good as no pillow at all. The weight of the head simply divides the stuffing into two parts, and lies between them. To an invalid, this is most distressing; and even the old-fashioned pillows, as often made by kind people to whom time was no object, of torn-up letters, afford much more comfort.

Preservation of Bedding.—All beds and mattresses ought to be protected from the dirt that must inevitably accumulate on their edges. Some mistresses think it may be prevented if servants are only trained to wear large white aprons or pinafores for bed-making, kept for the purpose, and worn at no other time. Of course this is a very nice plan; but the mattresses, &c., may just as well be taken care of independently of the servants. For this purpose have a length of shiny holland, split it down the middle, and tack a strip all round the border of every mattress, allowing it to lap over an inch or two on the flat part. Always tack it with needle and thread; there are some who pin it, and some unlucky day a poor servant tears the side of her hand with a pin-point, and the bed she is making is very far from being improved thereby.

If you do not care for the expense of the holland, use unbleached calico, and take it off to be washed and replaced at spring-cleaning times. All pillows and bolsters should have covers of holland or unbleached calico, made like an ordinary pillow-case, and tied or buttoned on; and as there is a right and a wrong way of doing everything, pillows so covered should be put into the linen pillow-case with the buttoned end first, so that no tick can be espied when they are in use. Feather beds should be entirely covered by a case made of holland or unbleached cotton about two inches larger each way than the tick; and even the wire-chain mattresses should have a square of strong material properly hemmed all round, and fastened over them, to protect the bedding above from the friction of the wire. These are not fads, but ought to be the rule, and not the exception, in every household. The bedding is not only preserved from soil or injury in case of lengthened illness, but if the household is broken up and the furniture sold, clean, well-preserved bedding fetches as much again as the soiled and shabby.

Bedding for Children.—For babies and young children up to three or four years of age, there is nothing like a bed of oat-chaff, renewed every three months or so, when the tick should be washed before being re-filled. The oat-chaff is very sweet and clean of itself, and, though sufficiently warm, is not heating.

Washing-Stands.—These are of many kinds—from painted deal, to iron or tin and marble. Some of the old wooden ones still remain; and those who have them, repaint them from time to time rather than buy new. However fresh and nice that paint may be, the very first time a wet cake of soap is laid down on it, instead of being put in the soap-dish, it is ruined; and the same holds true, only in a less degree, of every splash of soapy water. There are some handsome old mahogany washstands, made before the days of marble tops; and those who have them, or the painted ones either, frequently cover the flat surfaces with a white marbled oil or American cloth, which at first looks clean, and is easily wiped, but it is soon defaced, and merges into a condition best described as “mangy.” These washstands, if good and strong, are, however, capable of treatment that makes them bright, ornamental, and dainty. We have seen an old drab one (drab used to be the favourite colour) enamelled a bright scarlet, and a “maple” one painted a “sparrow-egg blue.” Both were quite things of beauty; and the flat surfaces above and below were covered with huckaback covers, with a row of lace in front, just as a finish.

The upper one had the round for the basin cut out and hemmed round, the lower went all over. These cloths are perfection for a mahogany or rosewood washing-stand; they can be frequently changed, and look very nice. Java canvas or a good holland looks well, but huckaback is peculiarly suitable for a washing-stand.

Capital washstands for the night-nursery, or for boys' or school bedrooms, can be made of plain good deal, that can be kept scrubbed; and with three moderate-sized holes cut in them, they can be cheaply and nicely fitted up with medium-sized basins, ewers, brush and soap dishes, and chambers to match, which may be had at most good furnishing houses at 3s. 9d. per set.

Metallic stands are made so as to occupy very little space; they are contrived in various ways, and generally painted oak or a plain colour outside, and white inside. They are specially suitable for servants, and for any situation in which space is limited, and the chances of breakage considerable. They are very cheap; but, unless carefully used and daily cleaned, are liable to become very nasty. There is one class of purpose for which japanned goods should never be used, and that is for slop or toilet pails. Only with extraordinary pains can they be kept from smelling perceptibly, and a single day's neglect is enough to make the room in which they stand, or are even carried for a few minutes, uninhabitable.

Marble-topped washstands are well-nigh universal—at all events, when new furniture has to be bought. The stand must be strong, in order to bear the weight of the marble slab, which, in a general way, has a second piece affixed to it, forming the back of the stand, and to this is fastened a small shelf for the accommodation of water-bottle or sponge-basin. A still more modern form has a slab of marble on the top, and a back high enough to prevent any injury to the wall by splashes; and in this back a couple or three rows, or perhaps a square of tiles, is set. Almost every firm has its special make of good washstands; while fair all-round serviceable ones are turned out by the thousand, and may be bought almost anywhere. It seems to be too often supposed that because there is a marble slab on a washstand, less care need be taken about spilling water and wiping it up; but this is a great mistake. Water, if allowed to stand even in small quantity, makes the marble a dark colour; and continued damp produces a yellowish colour not unlike iron-mould, but which is, in reality, the clay intermingled with the white limestone. There are several kinds of marble in ordinary use—the Sicilian, veined with grey, which is very moderate in price; statuary marble, which costs far more, and is a dead white,

but in a damp situation, and in course of time, is apt to become patched and clouded with the clay mark; and two or three kinds of pinkish and dark grey marbles—this last being the latest fancy, and said to retain its colour and beauty in a remarkable manner.

An Authority on Washstands.—Mr. Edis makes some remarks on these articles of furniture which point to yet further developments and possibilities of form and make. "Washing-stands," he says, "should be of the simplest possible construction, fitted up with tiles to a height of eighteen inches or two feet at the back, with as little woodwork as possible to get wet and dirty; the sides can be formed into useful cupboards, with racks or pegs for boots—generally difficult articles of dress to stow away comfortably; while the centre might be fitted with a zinc receiver to take off the waste water—this receiver being made immediately under the basin, with a place to allow of the dirty water being easily emptied into a pail, and with ample access for thorough scouring and cleansing. A glazed earthenware trough is better than any metal-work, as being less likely to hold grease and dirt, and more easily scoured; but all these receivers must be so made that they can be readily accessible, or they will become foul with soap and dirt, and soon smell sour and unhealthy."

The idea of a receiver under the basin of a washstand, as facilitating emptying the contents into a pail, commends itself to many minds as diminishing the risks of breakage which are run in an ordinary way; and perhaps it does. But however easy it is to keep these receivers clean, and to place a pail under them, there is always the possibility that the trough will not be scrubbed, nor the pail removed and emptied; and nothing smells worse than stale soap-suds. The ordinary washstand, with a plain marble slab on the top, on which the basin may stand (without a hole cut to receive it), is really the cleanest and

most satisfactory of all, because it positively offers no opportunity and no lurking-place for damp or dirt.

A Model Washstand.—An admirable kind of washstand for a small room, yet one that, slightly elongated, would give ample space for a double set of apparatus, is shown in another of Mr. Edis's designs (Fig. 2). It contains no less than four drawers—invaluable for storing a spare towel or two, a little stock of soap, flannels (or what American ladies call "wash-rags"), the roll of old linen and lint that should be handy in every one's room, and the many other trifles it is desirable to have always at hand in connection with the toilet. The two cupboards serve the purpose of pedestals, which, when separate articles of furniture, are usually placed close to the head of the bed—an unhealthy and much-to-be-deprecated practice. These cupboards require daily airing, by leaving the cupboard-doors open after wiping them out. This is the only way of getting rid of the dampness;

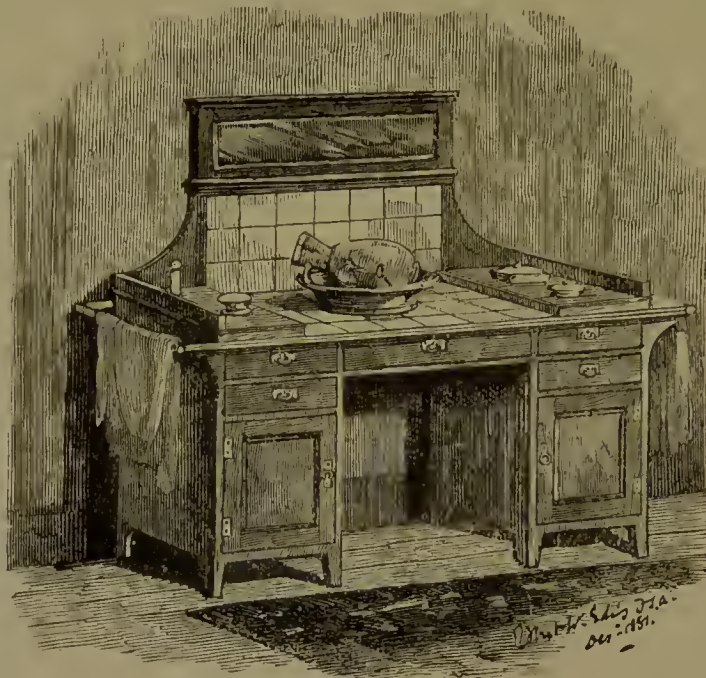


Fig. 2.

but it is rarely thought of or attended to. Another advantage of this washing-stand is that it has brass or wooden rods at either end for the towels, thus obviating the use of a towel-horse—an article of furniture easily knocked over, and much disliked by many people in consequence.

Another excellent pattern frequently seen in all the shops now, generally enamelled one of those very pale greens which are such favourite colours for modern bedroom furniture, has only a single drawer at each side, and one cupboard in the centre, leaving an empty standing-place on each side of it. Tiles are fitted all along at the back, and the whole makes an exceedingly simple, cheap, and excellent design, whose universal presence is the best sign of its popularity.

Any one who lives in a house of his own, or who has taken a lease of a suitable one and is likely to remain in it, will find it a very good plan to have

light wooden rails of pitch-pine or red-wood fastened to the wall or panelling, in order to take the towels. These need no polishing, and are quite ornamental; and, if fitted and made by an ordinary carpenter, are not at all expensive. Before putting them up, however, it is desirable to make sure that the very best position has been selected for the washstand, because, if the rails have to be removed, they leave ugly traces of their presence on the wall from whence they have been taken.

Shelves over Washstands.—Very few washstands are sufficiently roomy to permit of two soap and brush dishes, bottles, glasses, &c., being placed on them without overcrowding, and a nice pine or cedar shelf fixed across (especially where the washstand is in a recess) is a most useful and comfortable addition to its conveniences. In case of illness a shelf of this sort is valuable for the medicines and glasses in use.

Combination Washstands.—These are not very common articles of furniture—at all events, in England, though they are often seen abroad. In the first place, there is a chest of drawers; and above it, first a panel of wood or tiles about a foot and a half wide, and above that a looking-glass reaching almost to the ceiling. A slab of marble fits the top of the drawers, and on it the washing apparatus is placed.

Chests of Drawers.—Cheap and ill-made chests are always characterised by the fact that the drawers stick and do not run easily and smoothly. Those that have been good in the beginning never lose this characteristic, though they may exist to

extreme old age. It is a great mistake to choose drawers that are too deep, as when filled they are heavy, unless the contents are of a very light kind indeed. They are generally used for small things, and for body linen, with perhaps an assortment of a woman's dress-bodices (the skirts being hung up) or of a man's waistcoats and trousers (his coats being hung up). The top, where space is valuable, frequently serves as a dressing-table, and some are made with a little ledge along the back and two ends to prevent things from slipping off. Chests of drawers that are worth having are always expensive things to buy, and yet it is scarcely possible for any

one who cares to be tidy to do without one, unless it can be combined in a single piece of furniture with a wardrobe.

Wardrobes.—Many old-fashioned wardrobes were made with drawers in the centre, a cupboard above them, and a hanging-closet upon each side, one having at the bottom a kind of bonnet-box, every part of which was movable; while the other side had a few small trays or shelves, which were equally movable.

The hanging-cupboards (if they had not looking-glass panels taking the place of a cheval glass) had central panels of wood, which could at any time be exchanged for looking-glass; in fact, the great characteristic of these good old wardrobes was the manner in which every part fitted into every other part when they were properly put up, and almost every portion of the interior fitting was interchangeable with other portions.

There is, again, the well-known "gentleman's" pattern of wardrobe, which consists of a good chest of drawers at the bottom, and a range of sliding trays as shelves above, enclosed by folding-doors.

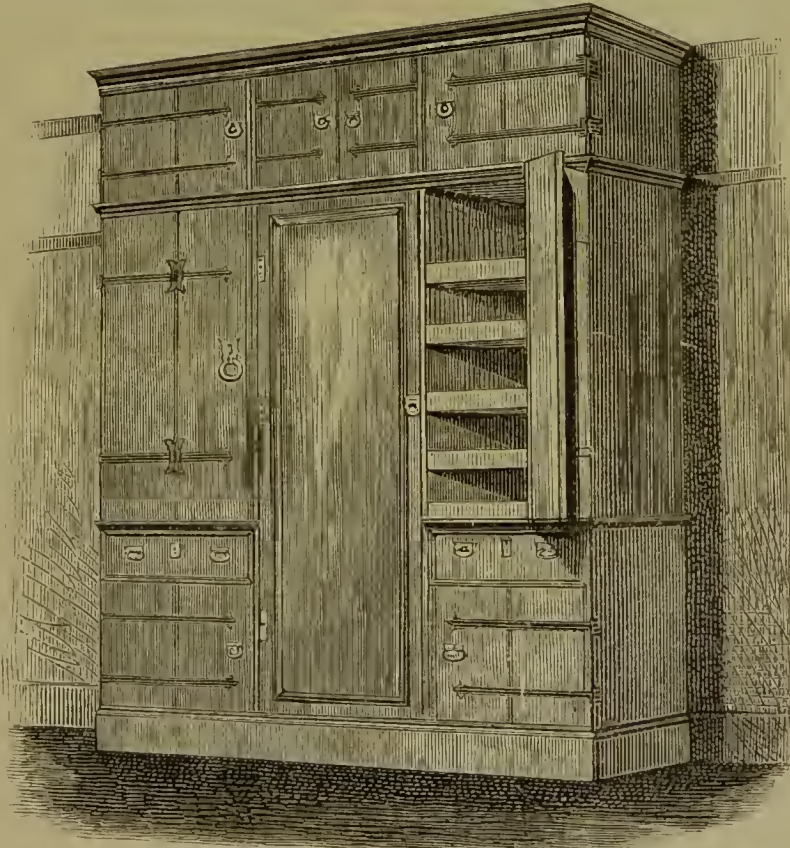


Fig 3.—WARDROBE FITTED TO CEILING.

As its name implies, this is an excellent pattern for a gentleman; but ladies differ a great deal in their opinion of it. Some like it extremely, and we have known it chosen by a lady for the sake of the trays and *long* drawers. Other ladies, on the contrary, will have none of it, and pronounce it inconvenient—probably because there are no hanging-cupboards in its equipment. Large wardrobes are sometimes made with a “gentleman’s” in the centre, and a large hanging-cupboard on each side, the cupboards having drawers underneath.

A very convenient and cheap piece of furniture consists of a hanging-cupboard only above, with one or two drawers beneath. These can be bought at all prices from £2 upwards plain-painted; and the ugly oak grain which is so common is easily altered, even at home.

The top of an ordinary wardrobe, if not absolutely flat, is often slightly sunk below the frontage, to give the opportunity for laying certain things there that may be out of use for the moment, and this really means that the whole top is one large dust-trap. Many are now fitted up with cupboards to fill the space between their tops and the ceiling (as at Fig. 3), and very handy such top cupboards are for storing winter clothing during summer, and *vice versa*. But the ceiling of rooms, of bedrooms especially, varies in height, and the wardrobe that exactly reaches one may leave the distance of a foot or more between its top and the ceiling of another. In such cases it may be worth while to fill up the interval, painting the additional wood to match the rest.

Curtain Wardrobes.—It has been already pointed out (Vol. I., p. 176) that recesses in bedrooms are very easily and inexpensively converted into hanging-cupboards or wardrobes by fixing a shelf all the way along at a convenient height, and a rail of wood below it, into which hooks are fastened. Iron or brass rods run along the front of the shelf and support curtains, which can be drawn across to protect the garments hanging underneath. This does very well as a makeshift, but cannot compare with a proper cupboard or wardrobe for keeping out the dust and preserving clothes.

Fitments.—Here crops up again the question of fitments, or of lining the walls of a room with cupboards, shelves, &c., and very often making among them an alcove for a bed. This is a plan that makes the most of even a very small amount of space, and converts a mere cabin into a convenient apartment. If judiciously done, it also minimises the lurking-places for dust; but it is not worth any one’s while to put up fitments unless they live in their own house and intend to remain there.

Cheval Glasses.—Many ladies like to have a long glass in the bedroom. Though a glass panel in a wardrobe answers the same purpose, it cannot be made to shift about as a cheval glass does, and consequently the latter is more convenient.

Dressing-Tables.—The *Duchesse* or pedestal dressing-table is the very nicest and most useful of all, containing a good many drawers in its pedestals on either side, as well as smaller ones parallel with the glass (as may be seen in Fig. 4). They are, or should be, always fitted with good locks and keys, and are available for keeping jewellery, ribbons, gloves, laces, pocket-handkerchiefs, and all sorts of small things, while still leaving the upper ones free to hold the combs and brushes in daily use. Rather an old-fashioned dressing-table is a species of frame the top of which forms the table, while the front draws out, and forms a very good receptacle for an evening-dress, or two on a push. The ordinary deal table (with or without a rounded front, and intended to have a muslin petticoat round it and a toilet-cover on the top, on which the looking-glass, pincushion, scent-bottles, &c., may stand) is by no means to be despised, though very unkind things are often said about it.

Healthy Bedrooms.—Mr. Edis gives his ideas about bedroom furnishing as follows:—“In the smaller bedrooms of a house the wall-surface might be tinted in distemper a warm grey or bluish tint; the woodwork painted a dull blue or dark grey and varnished: the floors painted all over and varnished, with small rugs laid down next the bed and the dressing-table. A small washing-stand might be placed in the corner of the room, with a small chest of drawers, well raised off the floor, so as to allow of its being used as a writing-table: the mantelpiece could be fitted up as a dressing-table, with central glass, and cupboard and shelves for brushes and other dressing paraphernalia; the bed left open, without hangings or valances of any kind; a Boyle’s ventilator in the chimney-breast, and small apertures for fresh-air inlets cut in the sashes; and in this way we should have a healthy and comfortable chamber. The larger bedrooms might be treated in a similar manner, but with specially designed wardrobes, hanging-cupboards, window-ottomans (for bonnets and boots), large dressing-table (with glass down to the floor, swung between nests of drawers for gloves, jewellery, and the other requirements of a lady’s room), a small medicine cupboard and writing-table next the bed, and a couch and low chair, so that the room may be used as a private sitting-room, as well as for sleeping purposes, the same principle of ventilation being carried out here as that described for

the smaller rooms. With some such arrangement as this, we might have pleasant, cheery rooms, comfortable and healthy, and to a great extent obviate the unpleasant closeness and unhealthy atmosphere which is engendered by occupation at night with doors and windows closely shut."

Ottomans.—Where space is limited in bedrooms, chairs may be conveniently replaced by small box-ottomans, strongly made by a carpenter, padded on the top with a flock cushion, and covered with either cretonne or dimity properly made, so that it can readily be taken off, washed, and put on again. These ottomans are capital receptacles for bonnets and hats, and also for woollen under-wear, which goes into a small space and does not easily get tumbled.

Bedroom sofas, again, are very generally made as long boxes, and may be bought almost anywhere, at from £2 10s. to £4. (See p. 4.) The seat or couch part is just the length of a dress-skirt, and most convenient for taking such gowns as need not be kept hanging. Small ottomans also form capital substitutes for soiled-linen baskets, and are on many accounts preferable.

Carpets.—When furnishing a house for the first time, or whenever new bedroom carpets are necessary, it is both handsome and economical to have all of them alike. It looks so very nice, when doors are open, to see that all the carpets are the same; and from an economical point of view, when they begin to wear out, or a change of residence comes about, two carpets will make into one, or three into two, most advantageously.

Blankets and Counterpanes.—Blankets and counterpanes, to say nothing of eider-down quilts for winter use, run into a great deal of money, and yet there seems very little to show for what has been laid out. Three blankets at least should

be allowed for every bed; and instead of buying three small ones for each single bed, it is wise to have one small and one full-sized, which can be doubled when much warmth is required, and laid next the top sheet, and the single blanket put over it and tucked in. This gives three thicknesses, and large blankets are in many ways more serviceable than small ones.

We are strongly of Miss Nightingale's opinion, that under-blankets merely collect perspiration, and are therefore unwholesome, and we have not allowed for them. Still, many people who sleep on mattresses dislike feeling the places where a string and a round of leather are fixed to regulate the stuffing, and in that case the only alternative is to lay a blanket between the mattress and the under-sheet.

The best counterpanes for most plain people are the German ones, made of a kind of cotton fabric something like honeycomb towels, but more elaborate. They are porous and not very heavy, but the fringe is apt to get ragged after one or two washings; and it is wise to cut it off, put on a false hem of calico, which

will not show on the outside, and edge three sides of the counterpane with a knitted lace, which some poor gentlewomen, whose sight is not as good as it has been, will be thankful to make at a very moderate price. Pillow-laces made with Strutt's knitting-cotton are admirable for such purposes as this, but unfortunately they are not everywhere to be had.

But even these German counterpanes, light as they are in comparison with the old Marcellas, speedily get dirty, and are very cumbrous to wash; and unless this process can be carried out in fine weather in the country, they have a habit of looking very little the better for their experience of the wash-tub; and therefore many modern housekeepers prefer covering their beds with a square of Roman sheeting, embroidered with the flax-threads that wash so well;



Fig. 4.—PEDESTAL DRESSING-TABLE.

and some merely embroider a linen sheet in the same way and use it as a coverlet, and allow extra blankets for warmth. The Como rugs, previously referred to for curtains, which are made of refuse silk from the mills of Como, in Italy, also make charming winter counterpanes; they are something like dhurries, in soft bright-coloured silks, and are very inexpensive—about 7s. 6d. each.

Quite a new material has been introduced, called "Cellular," which is woven in imitation as far as possible of the construction of the human skin. It is very light and porous, and three widths of it sewn together and edged with a suitable lace make a perfect counterpane. Cross-stitch stripes are usually worked down these seams in flax-threads, and many poor Irish ladies are employed in doing it. These counterpanes are very light and easy to wash, and the inventors of the material declare that it is perfect for sheets, and also for under-clothing. The adoption of it would certainly lighten the labours of the laundress, and reduce the dimensions of the family washing-bill.

Eider-down quilts are great luxuries to chilly people and the majority of ladies, but many gentlemen find them far too hot. There is much to be said, on this and other grounds, for the German fashion of having separate bedsteads for married people. In many cases this plan would insure to both, who perhaps require very different amounts of bed-clothing, much more healthy and comfortable sleep.

Toilet-Covers.—There has been a reaction of late against white covers for toilet-tables, and many people use tapestry mats or cloths instead. But unless quite new they neither look nor feel so clean as white, and one cannot help feeling that everything connected with the toilet should be washable. Cellular, edged with lace, and perhaps with a worked border, is very pretty, and so is Java canvas, but neither must be starched. Toilet-covers of German make, like the counterpanes, are very nice. Drawn linen looks well; and we have seen a pretty cretonne with an all-over pattern, edged with a ball fringe, which last must, however, be taken off for washing, and stitched on again. If no cover is used—and it sometimes is designedly absent from a handsome Duchesse dressing-table by way of not covering up the highly polished wood—mats must be placed under all hard articles, that they may not scratch and deface it.

Earthenware.—Nothing has more improved of late years than the sets of ware for washing-stands; they are not only prettier but cheaper than formerly, and have more conveniences. Among Staffordshire

ware there are charming sets, with very large nat. bottomed basins, in cream and pink, or rather a decided red, of which a double set costs only 23s. There are so many patterns, that selection must depend on individual taste; one admires what another thinks very ugly. But colour should always be studied in connection with the rest of the room. Every set ought to include a proper sponge-basin, and every washstand ought to be provided with an earthenware jar or pail for waste water, which in these days run about 4s. 6d. each, and have wicker handles. They are delightfully clean and convenient, and pleasantly wide at the top—exactly what the slop-jars of former days, with their reversible lids, were not. It is wise economy to have several sets of ware alike, as breakages will occur; and if they cannot be matched, a set may be made up from the remains.

Medical authority has pronounced upon even such apparently trivial matters as the usual tray for nail and tooth brushes, and condemned them wholesale—at least, unless the *cover* is destroyed or hidden away. One good experience of the "musty" smell, which never occurs when clean brushes are left exposed to the air, will be found ample reason. The result of this condemnation is seen in the little "racks" now found in all the shops, for holding minor toilet implements, and which are to be preferred to trays in every way. The tidiness of a covering-lid is ill purchased at the price it costs.

Glass.—Bottles and glasses, or the coloured glass jugs and tumblers so often used for the washing-stand, should invariably be washed and dried every morning, just the same as the teacups and saucers. Some mistresses insist on the housemaid bringing them all down every morning on a tray to her pantry, and there washing and polishing them just like any other glass, and filling the bottles or jugs with freshly filtered water before restoring them to their accustomed places. This is peculiarly desirable with the cheap coloured glass jugs, on which every splash of water that dries itself unwiped produces the effect of a blotch of dust. Every washing-stand intended for the use of people whose teeth are not all those with which Nature originally endowed them, ought to be supplied either with small basins matching the ware, or, better still, with plain finger-glasses, white or coloured, but perfectly distinct from all others in the house, so as to insure that they are never used for any other purpose than the one intended.

Hot-Water Jugs.—There is nothing so nice for bedroom hot-water vessels as brass cans; or so unpleasant as the common painted ones, which are apt to smell whenever hot water is put in them. But

brass is expensive, and it is both cheap and clean to have a collection of brown-stone jugs always kept for the bedrooms, never used for any other purpose, nor carried downstairs; and, indeed, so exclusively should they be used for the bedrooms, that there should be none in the least like them in any other part of the house. They cost from 4d. to 6d. and 8d. each, and are sufficiently wide in the mouth to allow of the introduction of a hand, so that they may be always kept clean. Very pretty stone-ware cans are now made to match the basins, ewers, &c.; they are expensive, as most luxuries are, but extremely nice.

Foot-Baths.—Painted iron or tin foot-baths and cans of common quality are just as objectionable in these large articles as in smaller ones, but have been very generally adopted, because they are unbreakable. The best ones, when well seasoned, are not liable to the same objection. But white earthenware baths are only from 5s. 6d. to 8s. each, according to size, and it is not absolutely necessary to afford a separate one for every room in the house. Large brown-stone pitchers serve all the purposes of hot-water cans to accompany them, but of course they are liable to be broken, though not more so than cans are to be left with just enough water in them to make the bottoms rusty, and before long leaky.

Bedroom Chairs.—The very nicest chairs for bedrooms are good birch or oak, or painted ones with cane or rush seats, supplemented by a flat cushion on each, with a cretonne or chintz cover and frill, made with buttons, so that it easily comes off and on for washing, and securely tied down with strings to prevent slipping. A large wicker armchair with cushions, or any kind of old easy-chair with a washing cover all over it and supplied with extra cushions, is a great comfort in a bedroom.

Medicine Cupboard.—If the apartment sacred to the house-mother does not contain a cupboard that can be set apart for medicines, and the roll of old linen, store of sticking-plaster, glycerine, carbolated vaseline, &c., that should be kept in every house, there are very pretty ones made to fit into corners, or to hang on the wall. (Fig. 5.) They should always be placed well above the reach of children, and fitted with lock and key. A bookshelf and a small writing-table are also extremely desirable articles of furniture in a bedroom, and more so in a spare room than in any other; but hanging-shelves of all patterns can readily be purchased which answer every purpose, provided only that the wall be strong enough to bear their weight.

And this reminds us that the lath-and-plaster wall of modern cheap houses is a very serious matter, as conversation can often readily be heard in the rooms adjoining that in which it is carried on. This is awkward enough even in regard to sitting-rooms, where occasionally business may have to be discussed in private. Still more disagreeable is it for husband and wife, the heads of the family, to feel that they cannot be sure of discussing the

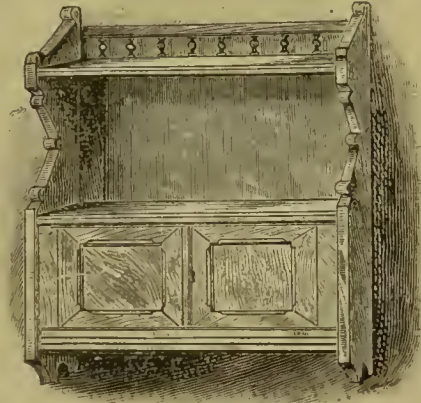


Fig. 5.—MEDICINE CUPBOARD.

most private matters in real secrecy, even in the seclusion of their own apartment; and if amongst the bedrooms one can be found with a brick wall at the head of the bed, or which is more impervious to conversation than others, that would often determine a really wise choice as to which should be the principal bedroom.

Estimates.—We will give only two estimates for bedrooms, because from these the cost of others may be calculated very easily. The prices given are selected from the catalogue of a well-known firm, and leave “fitments” out of the question altogether. Let us take first the principal bedroom:—

	£	s.	d.
Iron and brass bedstead, with palliasse, wool mattress, bolster, and two or three pillows	10	0	0
Double washstand	4	4	0
Three cane chairs, at 3s. 6d.	0	10	6
Dressing-table and looking-glass	5	5	0
Chest of drawers	6	6	0
Fender	0	5	0
Fire-irons	0	4	6
Kidderminster carpet	1	15	0
Towel-horse	0	4	6
Total	£27	14	6

Expenses in this bedroom can be reduced by having a single washstand if the dressing-room is used; and by having a plain deal dressing-table with a “petticoat,” or painted with an “enamel” paint, and a looking-glass that would cost about 30s. As to how to increase the expenses and conveniences,

that may readily be left to the reader's imagination, a good wardrobe and sofa being the principal items.

Now for a servant's bedroom to accommodate one; and we may add *en passant* that two servants will be happier and more comfortable if each has a single separate bed, which only costs complete, with mattresses, bolster, and pillows, about 28s.

	£	s.	d.
Bedstead and bedding - - - - -	1	8	0
Chest of drawers - - - - -	1	10	0
Toilet-glass - - - - -	0	5	0
Japanned washstand and fittings - - - - -	1	1	0
Chair - - - - -	0	2	6
Carpet - - - - -	0	5	0
Total - - - - -	£4	11	6

Dressing-Room.—In modern houses the bath-room often serves as a dressing-room when required; but if there be no bath-room, the dressing-room may contain a bath; and a small wardrobe is a treasure, but one that may be dispensed with if it has a hanging-eupboard. Of course, a dressing-table, a chest of drawers, and a chair or two are good additions if room can be afforded.

	£	s.	d.
Rug or carpet - - - - -	0	15	0
Bath - - - - -	1	1	0
Single washstand - - - - -	1	10	0
Set of ware, bottle and glass - - - - -	1	1	0
Hanging-glass - - - - -	0	2	6
Total - - - - -	£4	9	6

VEGETABLES.

THERE seems to be a growing conviction that vegetables should form a very important part of our every-day diet. There is no doubt that in the opinion of the very best medical men of the present day, as a rule well-to-do persons eat a great deal more meat than is good for them; and that were they to eat less meat, and make up with fish and vegetables, they would be in a far better state of health than they now are. In England, how very rarely do we meet with vegetables served as a separate course! Now, abroad, we all know that the vegetables form a course by themselves, and it is only when *English* people dine at the *table d'hôtes* abroad that vegetables are served with the meat. Perhaps potatoes may form an exception, save when they are very new, when a very nice dish can be made by serving them with some white sauce.

There are even large numbers of persons in the present day who believe that the world would be better and happier were we to give up eating meat altogether. It would be somewhat out of place here to enter into the very numerous arguments that may be used on both sides of the question. We all know that there are in different parts of the world various bodies of men who bind themselves by vows never to eat meat. There is a famous monastery in the North of England, called Mount St. Bernard's Abbey, which is inhabited by a body of Carthusian monks. Now these men are entirely vegetarians; that is, they never even take fish. Their food consists of bread, vegetables, and vegetable soup. A little milk is used in making the soup, but we believe this is the only form in which even milk is taken. And yet these men perform an average amount of work daily. There are many workshops attached to the grounds, in which the monks work in wood,

and even in iron, making religious ornaments. What certainly strikes the visitor is the extreme pallor of their complexions; beyond this, however, they appear fat and well-favoured, as the three children of old who insisted upon pulse to eat, and in consequence found favour when they stood before the king, more than all who did eat of the king's meat.

Before, however, entering into the various courses of vegetables that may be served by themselves, we will run briefly through the best method of cooking vegetables in general. Here we may lay down at starting three cardinal points or rules, and those are:—First, that (with a few exceptions) all vegetables should be thrown into *boiling water*. Next, this boiling water should be *ample* in quantity. What we mean is that it is impossible to boil a cabbage properly in a very small saucepan which will barely take in the whole of the cabbage. The third point to be borne in mind is that the lid of the vessel should as a rule be removed while any vegetable which is of a *green colour* is boiling in it. The few exceptions to the rule with regard to throwing vegetables into boiling water are—(1) old potatoes, (2) old Jerusalem artichokes, (3) old parsnips, and (4) white dry haricot beans. As it is easier to recollect the exceptions than a number of vegetables, if you will just bear these four in mind, you can then say to yourself, *every* vegetable should be thrown into boiling water. If you do not throw green vegetables, especially, into boiling water you will never get a good colour: and as a rule you should not put on the lid, except for the purpose of bringing the water to a boil.

Potatoes.—First of all we will speak about that universal vegetable the potato. There is an old

saying, that you can always tell a good cook by testing her in cooking a steak and boiling a potato. First we must consider the old-fashioned, large, floury potato. When this is met with in perfection, there are few vegetables to match it, if it is to be eaten with roast meat. In boiling old potatoes of a large size, the first point to be considered is, as much as possible to have all the potatoes the same size. When, therefore, you have a quantity of potatoes to boil, and there are two or three very much larger than the rest, your only method is to cut the large ones in half, so that the pieces should be about the same size as the remainder of the potatoes. Place these in a saucepan, with plenty of water, in which a table-spoonful of salt has been thrown. The rule is, about a table-spoonful of salt to a quart of water. Bring them to a boil, and let them simmer gently until they are tender. If the potatoes are very large indeed, when you have brought them to a boil it is advisable to throw in a little more cold water, in order to take the water again off the boil; as, otherwise, you run the risk of having the outside of the potato boiled to a pulp, while the inside is hard, like they are generally served in Ireland, where it is a common saying that "a potato is always best with a bone in it." When you think that the potatoes are done, you must take the saucepan and strain off the whole of the water, and put the saucepan back on a slack part of the fireplace, laying on the top a cloth to catch the steam, and leaving the lid half on. In about ten minutes, or a quarter of an hour, or even longer, as the case may be, the potatoes will gradually dry, the steam escaping; so that what, when you first poured the water off, looked like a yellow pulp, is now white and floury.

New potatoes should be thrown into boiling water, and medium-sized potatoes—that is, very large new potatoes, or half-way between new and old—should be placed in lukewarm water.

Of course, in boiling potatoes, they must first of all be peeled. Here, again, the cook will find that experience is required. In large hotel kitchens, where they have what is called a vegetable cook, with three or four women under him, it is wonderful how very quickly with practice potatoes are peeled without waste. On the other hand, in private households some cooks are extremely wasteful in peeling their potatoes, and will throw away a great deal more than they should do. After the potatoes are peeled, they should be thrown into cold water; and in preparing for a dinner it is always advisable to get the potatoes peeled somewhat early in the afternoon, so that you have more spare time in what may be called the last three-quarters of an hour, when there are a large number of saucepans on the

fire, and a great many things to attend to at the same time.

In the case of sending new potatoes to table, if they are served with a little plain butter, all you have to do is to get some finely chopped mint, and sprinkle these little green specks of mint over each potato. But in the case of new potatoes being served in a white sauce, you might make the experiment presently mentioned of ornamenting them like the Jerusalem artichokes, by means not only of the green chopped mint, but a few of the red bread-crumbs there described as well.

Two other very nice forms of serving potatoes are fried potatoes, and potatoes *sauté*. First of all, fried potatoes require simply very hot fat. Remember in frying potatoes, that all potatoes when raw contain a very considerable amount of water. If, therefore, you have your fat very hot, and put in too many potatoes at starting, you are very likely to have the fat boil over, and by this means set fire to the chimney. Fried potatoes should be cut into as thin slices as possible, or into thin strips, and should be cooked a few at a time. The moment the potatoes begin to turn colour they are done, as it will be found that they continue to turn darker after they are removed from the fire.

Potatoes *sauté* are generally made from potatoes that have been boiled beforehand. If you have the remains of any cold potatoes left, you can cut them up into small pieces about one inch or more square. Throw these into a frying-pan with a little fat, and just brown the edges. As soon as they are hot through, and the *edges only* have become brown, the potatoes can be turned into a dish, and a little finely chopped parsley sprinkled over them. This is one of the best ways of using up any potatoes that may have been left. Another way was mentioned in the article on "The Uses of a Frying-pan."

Mashed potatoes make one of the commonest of dishes, and with a roast pheasant or anything of that sort, one of the nicest; but they often get a bad name, because when potatoes are not good enough to serve whole, they are often mashed to disguise their condition, which it does very imperfectly. *Good* potatoes should be boiled or steamed till they are mealy and dry, removing any discoloured specks. They must then be mashed in a bowl with a wooden spoon, being careful to have no lumps remaining. Then mix with them thoroughly a little butter, a very little salt, and a table-spoonful or two, according to the quantity, of *boiling* milk. When all is mixed and smooth, they can, if necessary, be put back into a saucepan and warmed; or they may be turned into a buttered dish, and browned in the oven, which must be "quick." Some people like an onion very finely chopped to be mixed with mashed

potatoes. Of course the onion must be first boiled till soft. The onion flavour is very mild when it is mixed in this way.

Onions.—That reminds us that the onion itself is a very favourite vegetable with many people; the large Spanish onions are generally preferred. They may be boiled till quite soft; or, still better, gently *stewed* in a covered dish in the oven; or baked, or grilled.

Greens.—We next consider the general method of boiling greens. These should be thrown into as large a quantity as possible of boiling water, to which salt has been added in the proportion of about a very full table-spoonful to two quarts of water.

The secret of good greens is that they should be served directly they are done. If it is possible to strain off the greens and send them to table almost within the same minute that they have been strained off, they are far superior to what they would be if they had been strained off, perhaps, a quarter of an hour, or even longer, before they are served, and what is called “kept warm.” Of course this is not always so easy. Cooks cannot calculate to within a minute as to when a dish will be required to be sent to table, especially when the dinner consists of previous courses of soup, fish, and *entrées*, the greens being served with the meat. But as a rule it will be found that cooks break down on the point of getting the vegetables ready *before* they are wanted, rather than being behind-hand. Cooks are naturally anxious on these points, and by their endeavours not to be too late, they very often spoil the dish.

Of all vegetables, none require such quick serving as Brussels sprouts. If each of you will call to mind the last time you ate a Brussels sprout, the probability is that if you can recollect rightly, you will find it was nearly half cold.

In preparing greens, the first point to be considered is to have them thoroughly well washed. We do not know whether it has ever been the reader's fate to find concealed among the leaves of the greens sent to table, a caterpillar. It certainly has been ours. This shows great carelessness on the part of the cook, and with persons of delicate stomachs, would set them against their food. In the case of cauliflowers it is not so easy to get rid of these insects, and for this purpose a cauliflower should always be placed, before it is boiled, in strong salt and water, upside-down. Should there be any of these insects lurking in the vegetable, the salt and water will cause them to come out of their own accord.

When vegetables are served with the meat, there

is not much scope for the cook to use any artistic taste in making the dish look pretty. It is, indeed, extremely difficult to ornament a dish of ordinary greens. On the other hand, there are occasions on which the cook can exercise a little skill. Let us instance a boiled leg of mutton, with which very often turnips are served whole. In addition to the turnips, we shall probably have some boiled carrots, and perhaps a dish of green peas. Now a very pretty dish may be made as follows:—Each turnip can be cut in half, and the interior scooped out. The carrots can be cut into slices, and some of the outside red part can be chopped up small, for you will remember that the outside of the carrot is of a deep red, while the inside is more of a yellow. Suppose now the cook reserves, say, half a dozen turnips, and by cutting them in half converts them into a dozen cups; before sending the dish to table these can be placed round the edge of the leg of mutton, and each can be filled with a spoonful of red carrot and a spoonful of green peas. By this means a leg of boiled mutton is converted into a really pretty-looking dish, owing to the ornamental vegetables by which it is surrounded.

Jerusalem artichokes also enable the cook to exercise a little taste, as these are generally covered with some kind of white sauce. This white sauce is, of course, all the better if made with a little cream. Generally it is made in the ordinary way by thickening a little milk. When the white sauce has been poured over the artichokes, get a little finely chopped parsley tolerably dry, then take some up on the end of the blade of a knife, and flip the blade so that these little green specks will fall naturally over the white sauce. A few red specks can also be mixed with the green, making the dish look a great deal prettier. This is very simple when we use lobster-coral to sprinkle over the surface, say, of a turbot; and we all know, if we have boiled turbot, it is customary to sprinkle over the white part of the fish a little chopped green parsley, and a little finely chopped or divided red coral out of a lobster. Now of course the coral of the lobster would be very much out of place in flavour with Jerusalem artichokes; but a very simple imitation of coral can be made as follows:—Take a piece of dry crumb of bread (not much bigger than the top of the thumb would be sufficient), and crumble it with the fingers on a plate till it makes some loose dry bread-crumbs. These bread-crumbs must not be very fine, like those we make when we rub dry bread through a wire-sieve, but the little pieces of bread should be the size of a large pin's head. Now take a bottle of red cochineal, and drop three or four drops of it into the plate or saucer upon which these few bread-crumbs have been placed, and

then shake the crumbs in the cochineal. They will instantly turn a bright scarlet colour, and in a few minutes will be perfectly dry. This cochineal and bread-crumbs is for all practical purposes absolutely tasteless; still, these few little red specks, sprinkled with the finely chopped parsley, give a dish what may be called "tone." We all know how very much a lobster-salad mayonnaise is improved, by being ornamented with these little green and red specks. And the cost is practically *nil*, as every household of any pretensions is sure to contain a little parsley; and a sixpenny bottle of cochineal would enable you to ornament dishes of this kind for twelve months. We simply call attention to the point, as Jerusalem artichokes, when served with plain white sauce, look rather uninviting. Any dish that is covered with plain white, with nothing to break the colour, is always unattractive, and by such easy means this can be avoided.

Asparagus.—Asparagus is perhaps another vegetable that deserves a few words. It is very important that asparagus should be of the same length, and of course we all know that the top, or green part, is the valuable part, while the stalks are generally useless. Consequently, when you get a bundle of asparagus, don't, as cooks too often do, arrange them by putting the thick part on the table and getting the green ends unequal, but take the asparagus and get all the green parts together, leaving the stalk parts some long and some short. Then with a long sharp knife cut off the stalks, so that when the vegetables are boiled they will be all the same length.

Some people cook asparagus by placing it upright in water, leaving the upper or green part to be cooked by the steam. The more general plan, however, is to throw asparagus into boiling water, and take it out as soon as it is cooked sufficiently, and then place it on a piece of toast. In that case the toast should be put in the middle of the dish, and the green part of the asparagus placed on the toast, while the stalks remain on the edge of the dish. It is almost universally the custom now to eat asparagus with the fingers, and by this means the stalks are, comparatively speaking, free from moisture.

As a rule, with asparagus do not pour any sauce over the vegetable. Some persons like melted butter or white sauce with asparagus, and some do not. It is, therefore, far better to have the sauce handed round in a butter-boat separately, so that those who like it can help themselves, and those who do not like it can enjoy their asparagus without "the grease," as some people are apt to call melted butter when served with vegetables.

Let us here mention that cold asparagus forms a most delicious salad. Suppose you have had a certain amount of asparagus left from dinner, it can be served cold for supper or cold the next day at luncheon, far nicer than would be the case if, as is sometimes done, it were warmed up again. Vegetables are rarely worth being eaten when warmed up. The best dressing for cold asparagus is made as follows:—Take a piece of butter, say one ounce, and place it in a saucer, and put it in the oven until the butter has melted. Then add to this a brimming teaspoonful of made mustard, and about one dessert-spoonful of vinegar, and a little white pepper. Mix it all well together, and pour it over the green ends of the asparagus. Of course, when the sauce gets cold, the butter hardens, and the sauce is very thick—almost as thick as mayonnaise sauce. This—for most people, at least—will be found the very best salad dressing that can be used for cold asparagus.

French Beans and Peas.—French beans are always popular, and, like all other green vegetables, the secret of their being good is that they should be served immediately they are taken out of the water. English people prefer beans perfectly plain; but when they are served as a separate course, they are generally mixed with a little sauce, and also a small quantity of sugar is added to them to make them sweeter.

So, too, with peas. Peas in England are served quite plain with the meat. Abroad, they are mixed with either butter or white sauce, and a little well-powdered sugar added to them.

We will now run through a list of the vegetables which are more suitable to be served as a course by themselves.

Haricot Beans. The first of these is that very much neglected article of diet in this country, known as white haricot beans. They are particularly useful in country houses, as, of course, these dry beans will keep good for months; and, as far as nourishment is concerned, they are one of the best substitutes for meat that are known in the vegetable kingdom. White haricot beans should be thrown into cold water to soak the night before. When this is done, you will often find that a few beans will float on the top. These should be removed and thrown away, as it shows they have a small hole inside which makes them float, and consequently they are bad, as the inside of this hole will be found to contain a sort of green mould or mildew. Next, the beans should be boiled, if possible, in some greasy kind of stock. For instance, if the day before you have had a piece of pickled pork or

boiled bacon for dinner, this greasy liquor can be utilised for boiling the beans. White haricot beans require a considerable amount of boiling: as a rule, they would require quite two hours, and sometimes, if they are very old, much longer. When the beans are tender, they should be drained off, and then have some butter added to them. In Italy they use a considerable quantity of olive oil; but there is an old-fashioned English prejudice against oil, probably owing to the fact that English people use oil in such small quantities, and keep it so long, that it becomes rancid before they use it. Really pure olive oil is absolutely tasteless, and is much more valuable for the purpose of adding to beans, salads, &c., than butter, as it is easier now to get good oil than it is to get pure butter, unless we live in some country place where the farmer's wife is unsophisticated, and we are personally acquainted with the cow.

If you do not object to the flavour of garlic, it is a very good plan to rub a piece of dry crust with some garlic, and then put the crust in with the beans, and stir them together, or the vegetable-dish can be rubbed with garlic and the beans tossed lightly together, when they will soon acquire a garlicky flavour. One head of garlic will be amply sufficient to flavour a whole quart of beans. When the beans have had the butter added to them, it is always best to get a good brimming teaspoonful of chopped parsley, and sprinkle this over the top. Another very nice form of serving beans is to mix them when cooked with two or three spoonfuls, or even more, of rich brown gravy; and if you have got some rich greasy gravy, such as might have been left on the dish after you have had roast pork or a roast goose, or even roast turkey, you will find that, however greasy the gravy may be, the beans will more than neutralise the effect of the grease, and you will have a very nice pleasant dish, besides which it is a very economical one.

Lentils.—Lentils are another form of vegetable now becoming somewhat fashionable. Lentils can be flavoured with garlic, and also possess the quality of absorbing a considerable quantity of fat or grease.

Celery.—Another vegetable very suitable as a course by itself is stewed celery. When you have a large head of celery in for making stock, and perhaps only require, comparatively speaking, a small quantity of stock, it is always best to reserve all the white part of the celery for some other purpose. It can either be served cold with the cheese, or it can be stewed and sent to table as a little course by itself. Stewed celery is extremely delicious, and only requires its own flavour to render

it palatable. The white part of the celery should be placed in a little stock (or even water, but of course stock is the best), and boiled until it is perfectly tender. The celery should then be strained off, and the liquor thickened with a little white *roux*, or some butter and flour. If you have any cream to spare, the addition of a little is, of course, a very great improvement; but if not, simply pour the thickened stock over the celery, sprinkle a little finely chopped parsley over the top at the last moment, and send it to table on a piece of hot toast.

Salsify is treated in almost exactly the same manner. Sea-kale also is similarly cooked.

Cucumber is sometimes served as a cooked vegetable, and very nice it is. First peel it and cut it longwise into thin slices, and soak it for about an hour in some weak vinegar and water. Then boil it until it is tender, and send it to table with a little Dutch or Hollandaise sauce poured over the top. Here, again, we can finish the appearance of the dish by sprinkling a little chopped parsley.

Very young parsnips will make a nice separate course. These require some good thick white sauce. One very seldom meets with them in this country sent to table in this way; indeed, it seems that parsnips are almost reserved in England to be served once a year—namely, on Good Friday, with some salt fish. When the parsnips are very young, however, they make a delicious little dish, worthy to be eaten alone.

Rice.—We now come to a very important vegetable indeed, although it is rarely regarded in that light—we refer to rice. In Italy rice is served in a variety of forms, but in this country it seems almost confined to the inevitable baked and boiled pudding, or else as an accompaniment to curry. Now it is not every person that knows how to boil it properly, even for these purposes, especially the latter dish we have named, viz., curry. Rice, when boiled for curry, should be perfectly dry; and each grain should be separated from every other grain. When it is sent to table as a clumsy mass it is never worth eating. The best way to boil rice is first of all to wash it thoroughly in two or three waters, or till we find that the water ceases to get cloudy. When you have done this, take an ordinary saucepan and butter the bottom, as you will find that rice is very apt to stick, and by buttering the saucepan you avoid this danger. Indeed, the saucepan can be rubbed with a piece of beef-fat or mutton-fat, as it will not interfere in any

way with the flavour of the rice, and it is much easier to grease the saucepan in this way than if we use butter. Cooks too often lose sight of this important point, viz., that by taking a very little trouble at starting to grease the bottom of the saucepan, they avoid the danger of burning anything that might be boiled in it afterwards; and, as we have said, rice is particularly apt to do so. Put the rice in boiling water, and let it boil freely for about ten minutes. Now strain off the water, and put the saucepan by in a hot place—but not where the bottom of the saucepan is exposed to sufficient heat to burn the rice—and allow the rice to swell. This takes about twenty minutes to half an hour, and varies considerably with the quality of the rice. A cloth can be placed in the saucepan to absorb the steam, exactly similar to the way in which we finished cooking potatoes; and every now and then, with a wooden or silver fork, the cook can toss the rice lightly about, in order that the steam may escape from the bottom part as well as the top. When this is done, the rice will gradually get dry, and the grains will be separated one from another.

Another way of cooking rice we once discovered by watching an Indian on board one of the P. and O. boats; and as this man was their head “curry-cook,” who had probably spent the greater portion of his life in making curry and boiling rice, it is worthy of mention. He first of all boiled the rice for about ten minutes, strained off the water, and then, adding a quantity of cold water, mixed the rice well up and strained it off again through a sieve. He then replaced the now cold rice in the saucepan, and put it back on the fire to get gradually hot through and to let the rice swell. The result was that the rice was quite perfect in its way, each grain being separate from every other grain. But the same result can be equally well obtained by the former method. When you have boiled the rice quickly for ten minutes, if you take out a grain, you will find that it is a trifle hard in the middle. After, however, allowing the rice to keep hot and to swell from twenty minutes to half an hour, this hardness in the middle of the grain goes away—in fact, the rice goes on cooking after you have strained off the water.

We will now describe how to make that very economical dish known as *risotto à la Milanaise*. For this purpose you require, say, about a teacupful of good rice—the best rice is always the most economical. Boil this in about two breakfast-cupfuls of fairly good stock, which when cold will form a jelly. The rice, however, can be boiled in water. But first of all you must take a large slice of onion, and fry the onion a light brown colour. This should be placed in the saucepan with

the rice when it is boiled, as well as a pinch of saffron (about as large as will cover a sixpence, or that you can take up with one pinch between the finger and thumb). Let the rice boil furiously for about ten minutes, and then remove the saucepan with the rice, stock, and fried onion from the fire, and keep it in a warm place. Gradually the rice will swell and absorb the whole of the stock if the quantities have been used that were mentioned—namely, about one teacupful of rice and two breakfast-cupfuls of stock or water. Now add a brimming table-spoonful of grated Parmesan cheese, mix the whole lightly together, and serve it at the commencement of dinner, having some more grated Parmesan cheese to hand round with it in a glass dish. Grated Parmesan cheese is now sold very cheap in bottles. Rice also is very cheap; a pennyworth of saffron would last a long time; and of course a slice of onion is scarcely worthy of being mentioned when we come to calculate cost.

This is an excellent dish to begin dinner with, on many grounds. The Italian who commences his dinner with a large dish of risotto, or sparghetti, or macaroni, does so on grounds of economy. In fact, it corresponds to eating the pudding before the meat, or commencing dinner with a large basin of pea-soup or potato *purée*. After a good dishful of this, a very small amount of meat, in comparison, will be eaten afterwards. If, therefore, you have a leg of mutton and a large family of children, we would recommend the experiment of weighing the joint after dinner on two occasions—on one of which you commenced dinner with a large dish of risotto (and as it will be a novelty, probably the children will indulge in it pretty freely), and then contrast this with the effect of giving them the leg of mutton to start with. Really, on grounds of economy, there is nothing worse than to give a plain joint of meat to commence dinner with, to a family of hungry children.

Sparghetti.—We have mentioned the word “sparghetti.” This is really a small kind of macaroni, as it resembles macaroni in every respect except that it is not hollow. It is a very economical dish to begin dinner with; and on the Continent, especially in Italy, is always the first dish served, even before the soup. First of all, you wash sparghetti until it is perfectly clean, and then boil it until it is tender. Take care that you do not over-boil it, as by this means you lose a great deal of the nutriment. Now strain off the sparghetti, and place it in a dish; mix with it a brimming table-spoonful of tomato conserve, and another brimming table spoonful of grated Parmesan cheese. Toss the whole lightly together with two forks. Now the grated Parmesan cheese, when it

comes in contact with the heated sparghetti, will melt, and consequently you should toss the sparghetti about until you see films something like cobwebs stretch from one piece to another. When it is in this state, it should be sent to table immediately. It is wonderful to see what an enormous quantity of this an Italian will eat at the commencement of dinner. There is a famous little restaurant in Great Compton Street, London, known as the "Italian Café." If you want to have sparghetti to perfection, and see what it really is like before you try it at home, go there and ask for one portion; which will be enough for three ordinary Englishmen, but only sufficient for one Italian.

Tomatoes.—Tomatoes are a species of vegetable, and can be served in a variety of forms. Plain grilled tomatoes are extremely nice served with chops or steaks, but for all practical purposes they are equally nice when cooked in the oven. The tomatoes should be placed in a tin, with sufficient butter at the bottom of the tin to prevent them sticking, and do not require more cooking than being made thoroughly hot through. A very nice entrée can, however, be made out of tomatoes in the following way, in which they can be served as a course by themselves. This dish is known as tomatoes *au gratin*. For this purpose you must get some ripe firm tomatoes; and in choosing tomatoes, always pick those that are red, and not a pinkish colour. When they have a pinky look, it shows they have been picked before they are ripe, and have been allowed to ripen afterwards. The best test of a good tomato is its red colour, and to be as free as possible from what we may call crinkles.

To make tomatoes *au gratin*, we require the assistance of a few mushrooms. We can use either a tin of mushrooms or some fresh ones, but we should always avoid those large mushrooms which are generally picked for the purpose of either making mushroom ketchup or also for grilling or frying like steaks: that is, avoid any mushrooms from which a black juice will run out when cooked. Small button-mushrooms are the best. Take a small quantity of button-mushrooms and peel them, if fresh. Chop them up finely with a piece of onion about as big as the thumb down to the first joint, a teaspoonful of finely chopped parsley, and nearly a saltspoonful of thyme. Next take a piece of ordinary cold boiled bacon, and scrape it with a blunt knife until you get sufficient fat off it to cook these mushrooms, onion, parsley, and thyme in a frying-pan. Add also a little pepper. When this mixture is cooked, proceed as follows:—Take each tomato and cut off the stem with a sharp knife, and squeeze out all the watery inside part

containing the pips. Next, with a spoon, fill each tomato with some of this mushroom mixture till it assumes its original plump form, with the red skin apparently stretched tightly over it. Then sprinkle a few bread-rasplings over the top, and place all these tomatoes, now filled with what we may term this highly seasoned mushroom forcemeat, in a tin in which a little sweet-oil or butter has been placed. Let them bake very gently till the tomato is cooked right through; now remove them carefully with a slice similar to those you use for taking up fried eggs, and place them in a dish. They can be sent to table just as they are, or a little rich brown gravy can be poured round the base of the dish, but not over the tomatoes themselves. This is an exceedingly nice way of serving tomatoes.

Mushrooms *au gratin* can be served exactly in a similar manner; but for this purpose we must pick some of what are called cup-mushrooms—that is, in which the top of the mushroom is a perfect cup, not more than about three inches in diameter. Try, if possible, to obtain all these exactly the same size. Now peel the cup part carefully, without breaking it, cut off the stalk and peel that, and then with a spoon scoop out the inside of each of the cups. Take all these scrapings and stalks of the mushrooms, and any of the mushrooms that you may have been unfortunate enough to break in peeling, and chop them up exactly as we did before for the tomatoes *au gratin*. Then add to them some chopped parsley, and very nearly a saltspoonful of thyme, and a piece of onion. Fry this in a frying-pan. Now fill each mushroom-cup with this mixture, and shake some bread-rasplings over the top, and place them in a tin in the oven, with some butter or oil, and let them bake gently till the cup part of the mushroom is sufficiently cooked. If you over-cook them, they will break; and when they break, of course the inside part has a tendency to run away. They can be served as they are, ornamented with a little fried parsley.

Cauliflower au Gratin.—There is, perhaps, just one more form of vegetables *au gratin* to be referred to, and that is cauliflower. This is generally served at the finish of dinner, and it is very simple and very nice. Take a cauliflower, and boil it in the ordinary way, taking care that you don't over-boil it so that it breaks and falls to pieces. Take it out of the boiling water, and drain it for some little time on a sieve or cloth, so that it gets quite dry. After a few minutes, when the steam has escaped, take some good white sauce, the thicker the better, and mask the white part of the cauliflower over pretty thickly. The word "mask" here means to smear or plaster. Next take some good grated

Parmesan cheese if possible, or, in default of Parmesan, any other kind of grated cheese that is dry. This cheese will, of course, stick to the outside of the cauliflower where the sauce has been added. Then with a salamander or red-hot shovel, which is virtually the same thing, brown the whole of the outside part of the cheese, and send the cauliflower to table. You can also brown the cauliflower by placing it on a little shelf hanging on the bars in front of the oven. But if you wish to make the dish look nice and perfect, it is better to have a salamander to finish off the dish with, so as to avoid having any white places in the surface of the cauliflower at all. When sent to table, the cauliflower should look exactly what it is; only the surface, that is usually white, should now represent the colour of a mahogany table.

Spinach.—One vegetable that deserves a few words specially is spinach. Spinach is one of the few vegetables served in England as a course by itself. Eggs and spinach, in many households, is the only form in which a vegetable is eaten really by itself; although within the last few years there is an increased practice of eating asparagus separately. Spinach is a vegetable about which there has been much dispute with regard to the best mode of cooking. Some persons maintain that spinach is best cooked in a very large quantity of water. On the other hand, there are those who maintain that it is best cooked with scarcely any water at all. We have tried both ways, and have come to the conclusion that no one will be able to detect which way the spinach has been cooked by the simple process of eating: though, of course, where it has been cooked in very little water the juice that runs from it is a much darker green than if it had been cooked in a great deal of water.

Spinach makes a great show before it is cooked, but occupies a very little space afterwards; and a great deal depends upon seeing at starting that the spinach is thoroughly washed. Now you cannot wash spinach like you do ordinary greens, and the best method to pursue is to place it in a deep pail of water. The spinach floats on the top, and the dirt settles at the bottom. After, therefore, having moved the spinach about quickly in a pail of water, take it off the top of the water with the fingers and throw it into a basin. Empty the water away, and wash it once again in some fresh water. Another point that should be borne in mind at starting is that all the stalks of the spinach should be picked carefully away, and it is well to let the spinach drain upon a sieve. Then throw it, a handful at a time, into a large stewpan or saucepan

of boiling water that has been well salted, and boil it until it becomes soft and tender. Francatelli, who is undoubtedly a very great authority on the subject of cooking, recommends that when we cook spinach, as soon as it is tender we should drain it off in a colander, and then immerse the spinach in cold water thoroughly, and afterwards squeeze it in a cloth so that all the water is removed from it. Whether this is necessary or not, we cannot say. We can only mention the fact that an authority of this kind states that it is desirable. Probably the idea is to get rid, as much as possible, of what we may call the spinach-green. The water in which spinach has been boiled is of a very bright green colour, and no doubt, in the minds of many persons, green-water of any description is thought to be objectionable. We all know, in the case of boiling greens and cabbages, how exceedingly unpleasant is the smell of the water in which greens have been boiled: and we also know how important it is for the cook not to pour the green-water down the sink while it is hot, as by so doing she causes an unpleasant smell to pervade the house, very similar to that which is got from a bad drain. Possibly there may be a prejudice against spinach-water, though, for our part, we cannot say we have ever detected anything unpleasant in the smell of the water in which spinach has been boiled. Consequently if you try the method of boiling the spinach with just sufficient water to moisten the bottom of the saucepan, and literally let the spinach stew in its own juice, you will have served with the spinach the whole of the green juice which would be extracted from it were it boiled in a very large saucepanful of boiling water.

Perhaps we should add that Francatelli recommends that after the spinach has been boiled, washed in cold water, and the cold water then extracted, it should be pounded in a mortar, then rubbed through a coarse wire sieve, and placed in a stewpan with a little butter, salt, and grated nutmeg. He also recommends at the finish, when it is quite made hot again, to add a gravy-spoonful of good sauce, a little piece of glaze, and about four ounces of fresh butter. This, of course, makes the spinach into more of a dressed *purée*.

In England, spinach is generally served with eggs. These eggs should be either hard-boiled or poached. We think hard-boiled eggs look the prettiest; but if you poach them for the purpose of being served on the top of spinach, we would recommend you to poach them rather hard. Then take up each poached egg in a slice with the left hand, and with a knife in the right hand cut the white right round rather close to the yolk. By this means, if you have poached the eggs properly, you will have the yellow

yolk surrounded by a rim of the white part of the egg not more than a quarter of an inch in thickness. When this is done, the effect is almost as pretty as if the hard-boiled eggs were cut in half, and stuck into the spinach.

There is no doubt, if you take the trouble, spinach is much nicer if rubbed through a wire sieve. Cooks are too apt to think that spinach is all that it should be by simply being cut across with a knife and fork.

Stuffed Vegetables.—Another form of vegetables is that known as stuffed vegetables. The simplest form is bacon and cabbage. Suppose you get a very large cabbage, white inside, with a good deal of stalk. A very nice and cheap dinner, especially for children in summer-time, is prepared as follows. Cut a cabbage right in half, and then with a knife scoop out a hollow place in the middle where the hard part of the stalk is. Next take a piece of fat bacon and fill this hollow with the bacon, and put the two sides of the cabbage together again, and tie it round with a piece of flat tape, taking care that the tape is put flat against the cabbage. You will often be told to "tie it up with a piece of string," but tape is far better. The cabbage is now plunged into boiling water, and allowed to boil until it is quite tender. Then you drain it off, and send it to table just as it is. Of course the boiling water has made hot the piece of bacon inside, and it is generally best to use a piece of fat bacon that has been boiled before. The fat soaks into the cabbage, and we get the best form of cabbage and bacon, as the cabbage-leaves are absolutely soaked in the fat of the bacon itself, instead of the water, which is generally the case when cabbage is served on a separate dish as an accompaniment to boiled bacon.

The reason you use tape for tying it up, is that string is apt to cut into the cabbage itself. In fact, in cooking, directions are often given to tie up the substance with string: in most cases you will find that broad tape is far better. When a vegetable gets soft from being cooked, or when a piece of meat swells with the process of cooking, if you have a piece of string, and have tied it up tightly, the string will cut into the vegetable or meat; whereas by using a piece of ordinary tape the broad way, there is no fear of this taking place.

This bacon and cabbage is, perhaps, scarcely worthy of the name of a stuffed vegetable, but there are other vegetables which, when properly treated, really make an extremely pretty dish, which to many people would be a novelty. For instance, let us take vegetable-marrows. Procure three or four small vegetable-marrows, and cut them in half lengthwise, and if possible, in so doing, cut them somewhat jaggedly. That is, suppose you take

a knife at one end and cut a third of the way down the vegetable-marrow, by withdrawing the knife, if it is a pointed one, and sticking it in at the point you left off at, you can make another cut a third of the length of the marrow in a rather different direction, and again finish with one more cut. (See Fig. 1.) By cutting the marrow in this way, when you put the two halves together again, it is much easier to keep them together; and there is no fear, at any rate, of their slipping lengthwise. Now scoop out all the centre part of the marrow containing the pips, &c. Then take some cooked sausage-meat, rather fat, and fill the hollow of the marrow with it; and when the marrows are young and small, it is as well to put in the sausage-meat hot. Now take the two sides, and put them together again. If the vegetable-marrows are very young,



Fig. 1 — STUFFED MARROW.

they will not require peeling; but if the peel is somewhat thick and coarse, owing to the age of the vegetable, the marrow should be very finely peeled at starting, on the same principle that you would peel a pear—that is, only take off the outside rim. As in boiling the vegetable-marrow we wish it to be as firm as possible at the finish, perhaps, upon the whole, the best and wisest course is to get a young one and not to peel it at all. Tie the vegetable-marrow round with two or three pieces of tape, taking care that the pieces are afterwards fastened to each other. This is important: for suppose the vegetable-marrow in the middle is five inches in diameter, and we take two pieces of broad tape, and tie them, one a couple of inches away from the centre on one end, and one on the other. These two rings of tape will obviously slip off easily at either end; but now, with a piece of extra tape, strap these two rings together in the centre, then there is no possibility of the two halves of the vegetable-marrow coming asunder in the saucepan, unless the tape breaks. Very often in boiling a vegetable-marrow of this kind, unless these precautions are taken, when the vegetable-marrow begins to get soft, the tape will slip off in the saucepan, the two halves coming asunder, and the whole thing of course is spoilt; but by tying it up in the way mentioned, failure is impossible.

Now plunge the vegetable-marrow into boiling

water that has been salted, and let it boil gently till the marrow is perfectly tender. You can tell this by sticking a needle into it. Frenchmen use those needles known as trussing-needles, but probably this implement is almost unknown to women-cooks. If on thrusting the pin or needle, as the case may be, into the vegetable-marrow, you find it perfectly tender as far as the sausage-meat, you can strain it off and send it to table just as it is, cutting the tape at the last moment after the marrow has been safely landed in the vegetable-dish. Here, again, a little care must be exercised as to which way we place the vegetable-marrow in the dish. If the crack where it has been cut be placed perpendicularly, and then the tape cut, the two sides will probably open and fall apart; but if the marrow be placed in the dish so that one side is downwards—and it is just as well to flatten the bottom of the marrow a little so that it stands perfectly straight without rolling over—then if we remove the tape, the upper half will simply rest on the lower half, and there will be no tendency for it to fall off. A great deal depends, in a dish of this kind, as to its appearance when sent to table. If the thing breaks, it looks ridiculous. If it does not break, it forms a sort of agreeable surprise when, on cutting the vegetable-marrow, we find we have a dish quite different to what we expected—namely, the sausage-meat inside, which, of course, is eaten with the marrow itself.

Other vegetables can be treated in a somewhat similar manner. A very delicate dish indeed can be made by first of all peeling a well-shaped cucumber. The cucumber must not be a long and curly one, but a short thick one, somewhat resembling the shape of the vegetable-marrow itself. Outdoor cucumbers are the best, and when they are in full season can often be got in London for a penny or twopence each. These cucumbers should be first peeled, then opened exactly in the same way the vegetable-marrow was done; only the two halves should be soaked for a short time in a little vinegar and water. In the meanwhile you can have prepared some rich white chicken forcemeat. Fill the cucumber with this, put the two sides together, tie them up with tape as before, and let them boil gently in the water until the cucumber is perfectly tender. Then drain them off, and send them to table covered with a little white béchamel sauce, or, better still, a little rich sauce which has been coloured a bright green by means of colouring matter made from spinach. This colouring matter is now sold in bottles, and is very cheap, and not unwholesome. If the cucumber is sent to table covered with white sauce, little pieces of the outside of the dark green peel can be chopped up fine and sprinkled over them, instead of parsley, and will be more appropriate. The dish can also be

brightened with a few little red specks, and can be ornamented with some small pickled cucumbers or gherkins round the edge—the smaller the better. In between each gherkin could be placed a tiny red crayfish. We now have a really elegant dish. If you calculate the cost, supposing the chicken forcemeat to be the remains of the meat scraped off the carcase of a fowl, it is by no means one that can be objected to on the grounds of economy.

Vegetable Purées.—A *purée* of any vegetable may be described as a vegetable boiled until it is perfectly tender, then rubbed through a wire sieve, and afterwards flavoured with the addition of a little white sauce, or cream, or butter, as the case may be, and generally a little pepper and grated nutmeg. It is impossible here to enter into all the *purées* that can be named, but we will give a short list of vegetable *purées*, all which are served very often as accompaniments to some other dish, such as sweetbread, mutton cutlets, &c. We can have *purées* of French artichokes, asparagus, tomatoes, truffles, mushrooms, Brussels sprouts, French beans, Jerusalem artichokes, sea-kale, chestnuts, potatoes, endive, sorrel, spinach, cauliflower, celery, turnips, carrots, and peas. The secret, of course, in each case is that the vegetables must be rubbed through a wire sieve, and sent to table of the same consistency that we find in well-chopped-up spinach.

Garnishes.—Vegetables can also be used as a garnish; and when so used they ought, in many cases, to be glazed. We have already defined glaze as that state at which good clear stock arrives when it is boiled away. Suppose you have got some really good clear stock of a bright colour; if you boil this away in a saucepan until the remains become the consistency of a bottle of prepared gum, the glaze will be complete. Keep this glaze hot in a very small stewpan, and then, if you wish to use vegetables as a garnish, you must dip the vegetables into the glaze before placing them round the dish. For instance, suppose you have a good dish of stewed steak, or what Frenchmen would call *ragoût*, for really it is one and the same thing; and suppose you wish to garnish the edge of this dish with some small carrots and turnips. After you have boiled the carrots and turnips (and, remember, the latter must be very small), if you simply place them round the dish, the garnish will be poor indeed; but if you dip them, after boiling, into the glaze, they will come to table looking in a very different state. In fact, the difference in appearance is exactly the same as that between a piece of mahogany that has been planed in the rough, and after it has been polished with a coat of French polish. Carrots,

turnips, parsnips, small artichokes, truffles, mushrooms, and little sticks of celery, can all be dipped in this glaze, as well as small onions that have been fried a nice brown.

Green vegetables should not be dipped in glaze, but they form a very nice contrast to vegetables of other colours when placed in between; just in the same way as when you serve Jerusalem artichokes and Brussels sprouts at the same meal, it has a very pretty effect to put one Brussels sprout in between the white artichokes, and then a row of Brussels sprouts round the edge. However, we may possibly revert more to this subject of ornamental vegetables, in another chapter especially upon the ornamentation of dishes.

Truffles can also be sent to table glazed; and when truffles are used for ornamenting dishes in bulk, they should always be dipped in some bright glaze first. Very probably advice upon the subject of serving large whole truffles is rather out of place in a work of this description, as we shall scarcely be read by distinguished French *chefs* who consider an income of £300 a year rather poor pay. The nicest way of sending truffles to table, should you ever be fortunate enough to have a quantity on hand, is the French method known as *à la serviette*. This virtually is treating the truffle exactly in the same way as you treat a potato. You put it in boiling water, boil it, and send it to table just as it is. It is always advisable, however, to send a little good brown gravy or *sauce Médère* with it in a separate vessel. The reason it is called *à la serviette* is, that when truffles are boiled whole, and sent to table plain, they are placed in a dinner-napkin, which has been folded so as to resemble the shape of a cauliflower.

To Make a Chartreuse.—In conclusion, we will give one very high-class dish indeed—namely, what French cooks call *Chartreuse* of vegetable. We will not go into the details of the inside of these moulds, but may add that they are generally in France filled with some kind of game, such as partridge, which has been cooked in the ordinary French fashion. However, you can cut up the remains of small joints of fowl neatly, and use this inside; but first of all take an ordinary cake-tin, a little over three inches in depth. Surround the inside of the tin with a thick piece of well-buttered paper. Butter the paper on both sides, so that it sticks to the tin without leaving it, and remember the thicker the butter the better. Now take half a dozen good-sized carrots and half a dozen good-sized turnips, and boil them; only take care that the turnips do not boil too pappy. Drain them off, and let them get cold. Now measure exactly the depth of the tin—suppose we say that it

is three inches deep. Cut the carrot and turnip into a lot of pieces an inch thick, and in size from an inch square to two inches square; or two inches wide, and three inches long. For sake of description, we will suppose you cut the pieces one inch square, though it should be observed, by having the pieces longer, the mould is easier to make. Now fill the outside edge of this cooking-tin with these little square bricks, so to speak, alternately red and white (Fig. 2). You pile them up like playing with a child's box of bricks. Next boil one or two savoy cabbages, drain these off, and make a mixture by pounding the savoy with a little butter or sauce till you get a smooth paste. Line the bottom of the mould with a layer of this mixture, remember-

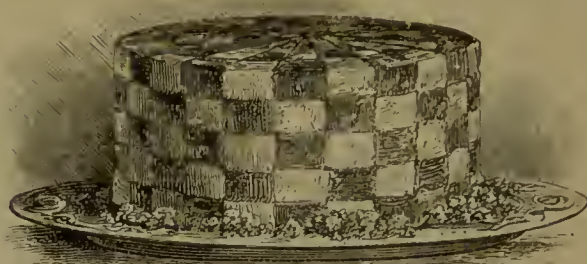


Fig. 2.—CHARTREUSE.

ing that the bottom of the mould must also be covered with a thick piece of paper well buttered on both sides. Now fill up the middle of the mould with any kind of chicken or game cut up into nice little pieces, but taking care that you do not have a quantity of liquid gravy, otherwise the result will be a failure. It is best to fill the inside with small pieces of meat, which will keep together by means of being dipped in some thick gravy or glaze. For instance, you might fill the dish with small pieces of sweetbread, each piece of which has been dipped in some glaze to avoid anything too liquid. Now cover the top with some more of the mixture of mashed savoy cabbage. Place the whole in the oven for about twenty minutes or half an hour, until it gets quite hot through. Take the tin out of the oven, place a dish on the top, and turn both together upside-down. Wait about a minute, then with great care lift the tin off, and take away, if necessary, the piece of buttered paper from what will now be the top; but more often than not the paper will stick to the tin and come off with it. You now have an extremely pretty-looking dish. It is a complete round, like Fig. 2, and the outside resembles a chess-board in which the squares are red and white.

This dish is by no means difficult to make, if at

starting you are not impatient, and do not wish to have it too high. If, on the other hand, you attempt to make it the height of an ordinary Stilton cheese, you cut the vegetables very thick indeed, which would rather spoil the dish when it has to be eaten, and after all will probably have a breakdown. Of course the dish can be ornamented by placing small pieces of carrot and turnip, cut into ornamental

shapes, round the base, previously dipping those pieces into a little bright glaze. Also a flower, which can be cut out of a carrot or turnip, or both combined, can be stuck in the top of the mould, in the centre. This is a dish very rarely met with in private houses, but when made it has a very elegant appearance, which will well repay the trouble you have taken.

HOUSEHOLD SURGERY.

THE St. John's Ambulance Association was established in 1877 by the Chapter of the Order of St. John of Jerusalem, with the view of disseminating general information as to the preliminary treatment of the sick and injured among all classes of society. A course of lectures, five in number, limited to a certain syllabus, is delivered in various parts of the country; and the students, after undergoing examination, receive a certificate of merit. It is said that over 90,000 of these documents have been distributed, from which it may be gathered that the standard is not very high. Holders of certificates, after twice undergoing re-examination at intervals of twelve months, have a medal given them. The office of the Society is at St. John's Gate, Clerkenwell, London, E.C., and the chief secretary is always willing to afford full information on all points connected with the work.

The London Ambulance Service has for its aim the provision of ambulance sick-transport carriages for London by means of public subscription. Dr. Evatt says: "As far as one can find out, the very existence of the 'London Ambulance Service'

Conveyance of Injured Persons.—Various forms of stretchers and litters have been devised for moving the sick and insensible, one of the best being Furley's, the arrangement of which will be seen by



Fig. 2.—THE ST. JOHN'S AMBULANCE.

a glance at the accompanying illustration (Fig. 1). The litter portion, with its cover, is easily detached from its wheeled support and carried by the handles at the ends. It may be obtained from the Director of the Stores, St. John's Gate, Clerkenwell, and costs complete twelve guineas. The St. John Ambulance Wheeled Litter is more elaborate (Fig. 2), and costs £16. The stretcher is easily detached, as shown in the figure.

Mr. Richard Davy, surgeon to the Westminster Hospital, has recently devised an ambulance carriage in which, in a very ingenious manner, he utilises slung hammocks, or suspended cots, for the transport of patients, either when injured, or when required to undertake a long railway journey. Mr. Richard Davy, who is the recognised exponent of this system, in one of his clinical lectures says:—

"I have lately introduced these hammocks to the profession for the transit of invalids by rail, because the conveyance of injured persons has been far too much left to chance, and no practical steps have been taken to remedy an inconvenience of daily occurrence. Let me direct your attention to this modified stretcher."

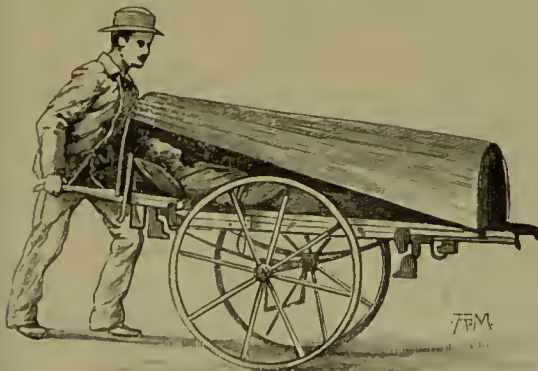


Fig. 1.—THE FURLEY LITTER.

is unknown to most people, and the London hospitals have not joined in any way in the movement."

on which is slung a small hammock. This apparatus is easily carried by two men, and is intended not only



Fig. 3.—SEDAN CHAIR.

for exercising patients in the open air, but also for conveying invalids to or from a railway station; so that the patient does not quit the hammock, and consequently all changing is unnecessary. The three patients who have been conveyed from Westminster to Margate, Ringwood, and Bournemouth, respectively, in hammocks by rail, have all expressed their great satisfaction; and I can personally bear witness to their testimony. With regard to the further use of hammocks, let me strongly urge that one, at any rate, should be kept at every railway station. Collisions, accidents, and vivisection in various forms, are terms familiar as 'household words' to railway directors; small provision is made by them for the transit of the wounded; in any grave accident a telegram could thus shortly produce a sufficient supply of swing-beds. In the North of Devon I know of men with fractured legs and strangled herniæ having been placed in a cart, on a bundle of straw, and slowly conveyed sixteen miles to the Exeter Hospital. Surely this procedure is not calculated to insure the recovery of the sufferer!"

When there is no stretcher or ambulance at hand,



Fig. 4.—THREE-HANDED SEAT.

some method must be improvised for lifting and carrying the sick or injured to a place of safety.

This is naturally most difficult when there is only one person at hand, or available for the purpose. A child, whether sensible or insensible, can be very easily carried in an extended position; the bearer placing one of his arms under the child's shoulders, and the other under the thighs. With patients of larger growth this is impossible; but even with them it is not difficult to afford some help. When the injury is to the foot or leg, the patient may, if of light weight, be carried by a strong man pick-a-back; but this would be impracticable if the wound were in the thigh, from the pain it would of necessity entail. When the patient is suffering from an injury to the upper part of the leg, and is unable to walk, he may be assisted by his friend placing his hip against his partner's hip, on the uninjured side, and taking the arm on the same side and placing it round his own neck holding it, if necessary, with one hand, whilst

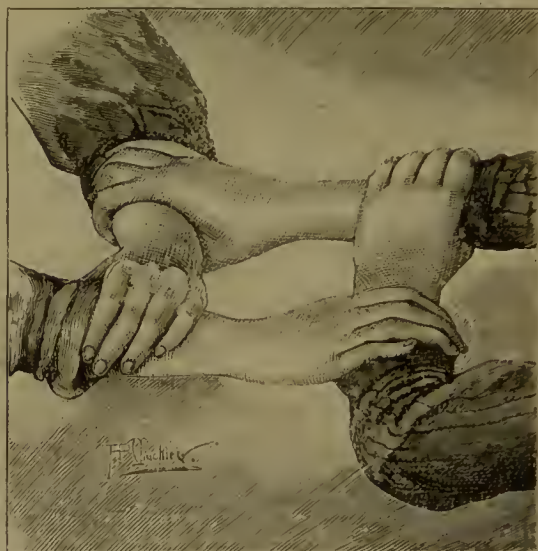


Fig. 5.—EXTENDED SEDAN CHAIR.

his other hand and arm encircle the patient's waist. Then he, in a series of short steps or hops, can be moved along, the injured limb being kept off the ground. When the patient is insensible, the problem is a much more difficult one; the best plan in this case is to adopt the method commonly employed by firemen. The individual is placed flat on his face, with the arms extended, and he is brought gradually into a kneeling position. The rescuer places his right shoulder against the centre of the body, with his right arm between the legs and around the right thigh; he then grasps the left wrist with his left hand, and placing it round his own neck, and under his left arm, passes it to the right hand, which grasps it by the wrist. The whole weight is then thrown on the right shoulder, and the left arm is disengaged.

When there is more than one person at hand,



Fig. 6.—SUPPORTING THE LOINS.

very little difficulty will be experienced in carrying any one, whether insensible or not. The ordinary sedan chair made by children when they clasp their wrists as shown in the accompanying figure (Fig. 3) will suffice for all ordinary purposes; or a three-handed seat may be made (Fig. 4), leaving one hand free to support the patient. Another way of making a "sedan chair" is for each bearer to grasp his own forearm, and that of his companion, in the middle (Fig. 5), the patient taking firm hold of the bearers' necks, and supporting himself. A good way of carrying a patient is shown in Fig. 6, but it has this disadvantage, that it is very fatiguing for the bearers, and is suitable for only short distances, one pair of hands being locked under the thighs, and the other round the loins, so that the bearers are in a partially stooping posture, and have to walk in a half-sideways manner. A very much easier position, if the nature of the injury admits of it, is that shown in Fig. 7, where only the hands in front are interlaced, and the others are placed on each other's shoulders. The injured person can be carried semi-recumbent in this position, and the bearers being upright, facing their destination, and carrying the principal part of the weight on the pair of arms behind, of double the strength, they can manage a good distance without fatigue. As a matter of fact, the accidents are very few indeed which necessitate

the patient being carried far by one person. Help of some kind will be available within a reasonable distance, and the patient, even if severely injured, may be safely left for the short time necessary to summon assistance.

Bleeding.—It is usually of far greater moment to take steps to stop dangerous bleeding than to move the patient. When the bleeding is slight, the application of cold water may be sufficient to arrest it; but when an artery is injured, some kind of improvised tourniquet may be necessary. When the bleeding is in the leg, a stone should be wrapped in a handkerchief, tied on the inner side of the leg or thigh, and then tightened by twisting it with a stick. For the arm the same method may be adopted, the stone or a pad being placed on the inner side of the arm, and the knot on the outside. (Fig. 8.)

In all cases of bleeding from the arm, and in most other cases of injury to that member, it is important to keep it quiet and in a raised position, which is done by "slinging." Now there is a right and a wrong way of slinging an arm. Placing the limb half-way in the handkerchief or other sling, always remember that the end in *front* is to be brought over the *opposite* shoulder (Fig. 9), the end *behind* the arm being carried over the neck on the *same* side to meet it. In this way the arm is kept well forward, and



Fig. 7.—UPLIGHT POSITION OF BEARERS.

the sling will not slip, as it does if carried over the neck in the opposite way.

Fractures.—When there is reason to think the bone is broken, a stick, or piece of wood of some kind, should be placed on the outer side of the limb, and

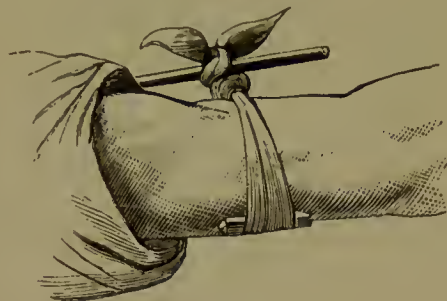


Fig. 8.—TOURNIQUET.

kept firmly in position by one or two handkerchiefs, or slips of clothing, tied tightly. This is very simple, but it is wonderfully useful; and if the bone is kept steady, and the broken ends are prevented from protruding through the skin, very little harm will result from conveying the patient to a hospital, or some other place where his injuries can be attended to. Elaborate directions might be laid down for the treatment of each particular fracture; but without a good anatomical or surgical knowledge they would be found of very little avail. The directions here given are perfectly simple, and any one, aided by a little common sense, would find no difficulty in accomplishing all that could be reasonably expected of him in case of emergency.

Wounds and Cuts always require very careful treatment. Wounds are of various kinds. For example, an "incised" wound is one made by a clean-cutting instrument, such as a knife or a sharp piece of glass. It may vary in depth and extent from a mere scratch to an injury necessitating the ligature of a vessel or the amputation of a limb. A "punctured" wound is one in which the depth exceeds the breadth. These are common enough in countries where "the use of the knife" is prevalent, and they are constantly met with in the army after a bayonet charge or a hand-to-hand conflict. "Lacerated" wounds are produced by blunt instruments, such as a stick or a poker, the tissues being torn and the edges rendered irregular. In "contused" wounds the surface of the skin remains unbroken, but the underlying parts are bruised and injured. Injuries such as these are common on our railways, and are often received in what are called "buffer accidents." Gunshot wounds vary much in character, according to the nature of the projectile and the force with which it is discharged; but, usually, there is a pecu-

liar appearance about them which admits of no mistake as to their character. Fortunately they are of comparatively rare occurrence in civil life, although common enough in modern warfare. Poisoned wounds are such as are inflicted with a dirty knife or other instrument; or the wound, after being inflicted, may become contaminated by contact with some decomposing substance.

The treatment of a bad cut or wound necessitates a good deal of care and discretion. Many people are temporarily unnerved by the sight of blood, and are incapable of acting promptly, or are perhaps unable to collect their thoughts for the moment. The first thing is to get the patient to sit or lie down, especially if he turns pale and exhibits a tendency to faint. The next point is to get the bleeding to stop, and, if the wound is not very deep, this is readily accomplished by elevating the part and snicing it with cold or very hot water. If a small artery is injured by the cut, and the blood is spouting out, the pressure of the finger will often stop it until skilled assistance can be obtained. The next thing to do after the bleeding has been stopped, is to clean the cut and get rid of any broken glass or dust which may have been left, and this is best done by squeezing water over it from a sponge. The edges of the wound are then to be brought together, either by strips of strapping or by the application of collodion. A pad of lint or rag soaked in olive-oil or carbolic-oil may be put over the part, and secured by a bandage neatly



Fig. 9.—SLINGING AN ARM.

applied. If the cut is a severe one, the limb should not be used, and should not be allowed to hang down, but should be carefully supported in a sling. It is a good plan to put a little carbolic acid in the water with which the wound is washed, so as to insure its being antiseptic (one part in two hundred will be quite enough). When carbolic acid is not at hand, there are many other substances which will act almost equally well as disinfectants and antiseptics. For example, Condy's Fluid may be added freely to

the water, or Sanitas, or any similar substance. When a wound is extensive, it should be "put up" entirely antiseptically; but this requires a great deal of care and much attention to matters of detail, so that a surgeon will have to be consulted.

There are certain wounds which require special attention. For example, wounds of the face usually bleed freely, but the bleeding is readily controlled by the firm pressure of a pad supported by a bandage. Wounds of the palm of the hand often give rise to a good deal of trouble, and to check the bleeding it may be necessary to use a tennis-ball, or some similar article, and bandage the fingers over it. In the case of gunshot wounds, pieces of wadding or fragments of clothing may be driven in deeply, and will require extracting. When a charge of small shot is fired from a distance, the injury is usually not serious; but care will be required to pick out the pellets from beneath the skin. A bullet usually smashes and carries everything before it, and there will be two apertures, one of entrance and one of exit.

Bruises or Contusions.—Contusions may result from direct pressure, or the part may be forcibly squeezed from a direct blow, as when the person is struck with some hard body, such as the knuckles or a stick, or from an indirect blow, as in the case of a fall from a height. A blow usually results in extravasation of blood into the tissue, a familiar example of which is afforded by the ordinary black eye. There is also a good deal of pain, and the limb, or part, may be rendered useless for a time. The treatment as a rule presents no difficulty. The first point is to excite the absorption of blood, and massage will do this in a few hours. Cold applications are useful, and it is not at all a bad plan to cover the part with lint or an old, soft, clean rag saturated with a lotion composed of one part of spirits of wine and eight or ten of water. It is never admissible to make a puncture with the view of letting out the blood, as an open wound would be formed which might be difficult to heal. Contusions of internal organs—the liver especially—are always dangerous, and require prompt medical assistance.

Black Eye.—A black eye can hardly be regarded, from a medical point of view, as a very serious complaint, although the sufferer may feel inclined to take a somewhat gloomy view of his case. It does not arise spontaneously, but from a cause which the patient is, as a rule, fully able to appreciate. It may be described in technical language as "a severe contusion of the integuments, with extravasation of blood and ecchymosis in the surrounding cellular tissue, accompanied by tumefaction and some abrasion of the cuticle." This

means the same as a black eye, and is equally painful. The treatment of this condition varies in different classes of society. Amongst the prize-fighting community special virtues are attributed to the prompt application of a raw beef-steak. Doctors as a rule prefer more orthodox remedies, and one of their favourite applications is tincture of arnica painted on freely with a camel's-hair brush. It often succeeds admirably, but it is not a very safe mode of treatment, as sometimes it gives rise to an acute attack of erysipelas of the face, which is worse than the original complaint. A safer remedy is hazeline, an aqueous distillate of the *Hamamelis Virginica*. It is a clear colourless fluid, having an agreeable taste and odour. It should be applied freely on a piece of lint, which should cover the whole of the affected part. It promotes the absorption of the blood, and considerably curtails the duration of the complaint. Even under the best treatment the patient will, in all probability, be unable to make an appearance in polite society for the best part of a week. He will do well to make the best of the opportunity, and take a few days' holiday in the country. In London, artists in black eyes are to be met with, who for the small sum of five shillings are only too pleased to obliterate all traces of the injury, and with a box of paints restore the affected part to its pristine hue. When the part is damaged beyond the hope of repair, the best plan is to paint the sound eye, in order that there may be some appearance of uniformity. Two black eyes, with a little assurance, can be attributed to a bad attack of biliousness, but one will hardly pass muster. The patient during his period of enforced idleness should keep his bowels open, and should partake sparingly of nourishment. As an accessory measure, massage is useful; and, if resorted to at once, may obviate the occurrence of any subsequent inconvenience.

Dust in the Eye.—The introduction of a foreign body into the eye usually gives rise to a great deal of pain and discomfort; it is common enough in railway travelling, and is often caused by a spark or particle of red-hot cinder from the engine. When the foreign body is merely lying beneath the eyelid, it can often be immediately removed by drawing the upper lid well down over the lower and then allowing the eye to be slowly opened, when generally the intruder will become entangled in the lower lashes and thus removed. If the substance is not got rid of at once, it gives rise to great irritability of the eye, accompanied by a copious flow of tears, inability to raise the upper eyelid and face the light, and a distinct feeling of irritation or grittiness of the part. The most difficult cases to treat are those in which a

fragment of glass or a fine spiculum of steel has penetrated the cornea, the presence of any small shining body being detected with difficulty. It is never safe to attempt to extract it unless its exact locality can be distinctly made out. After the removal of the foreign body a couple of drops of olive or castor oil should be dropped into the eye, a bandage should be applied, and no attempt should be made to use the eyes for at least a couple of days. When inflammation has been set up, a small blister, about the size of half-a-crown, should be applied to each temple, and the eye itself should be sedulously fomented with a decoction of poppy-heads, made by boiling an ounce of bruised poppy-heads in a pint of water for a quarter of an hour, and then straining. A three-grain calomel pill should be taken at bedtime, and followed by a saline aperient in the morning. The diet should be light and unstimulating. In some cases the tabloids of aconite are useful in warding off inflammation. A one-minim tabloid triturate of aconite may be taken every hour for six or eight hours.

A particle of quicklime in the eye gives rise to very serious symptoms if not attended to at once. The best application is vinegar and water, which should be applied freely. When the pain has been allayed, a drop or two of olive-oil should be dropped in between the eyelids. The injured eye should be seen at once by a medical man, as permanent injury to the sight is not uncommon in these cases.

Burns and Scalds.—A burn is produced by the application of dry heat, whilst a scald is occasioned by the application of a hot or boiling fluid to the body. Burns and scalds vary in the effects they produce according to their extent and severity. The worst cases of burning are those which occur when a woman's clothes suddenly catch fire, especially when they are of light material. The constitutional effects are always very serious, and depend not so much on the depth of the injury as on the extent of surface involved. In the case of children the shock to the system is usually greater than in adults. It is a curious circumstance, but one well authenticated, that burns about the body often give rise to ulceration of the upper part of the intestines.

The treatment is a matter of the gravest importance; and when the burn is at all extensive, not the slightest hesitation should be felt in sending for a doctor. When there is much collapse, and the patient seems to be sinking, there is a great temptation to give a strong glass of spirits and water; but this by many authorities is considered to be a somewhat risky procedure. It would be better and safer in the majority of cases to give fifteen drops of laudanum or half a teaspoonful of chlorodyne in a little water.

As soon as possible the burnt clothes should be carefully removed by cutting them up with a pair of scissors, care being taken not to strip off the skin with them. The sore places should be well covered with the finest wheaten flour, applied with a common kitchen-dredger; it should be laid on thickly and gradually, so as to form a protecting and soothing application. Another good remedy is carren-oil, a mixture of equal parts of linseed-oil and lime-water, which should be applied on lint. When nothing else is obtainable, a lotion containing half an ounce of bicarbonate of soda to the pint of water will be found efficacious. Whatever may be the dressing applied, it should not be changed for some days; not, in fact, until it has been loosened or rendered offensive by the discharges. Burns often give rise to terrible deformities and contractions; but in many instances these can be removed by timely surgical interference. Massage is useful in recent cases, and when the amount of contraction is not very great.

For scalds the same treatment may be pursued with advantage.

Sunburns require very little treatment; they give rise to a certain amount of pain, burning and itching, but never lead to serious results. The great point is not to resort to wet applications, but to rub in lanoline or cold cream. The bowels should be kept open by a simple aperient, and further exposure to the sun should be avoided.

Frost-Bites are much more serious, and not infrequently give rise to a good deal of trouble. The local effect of exposure to cold is manifested chiefly on the extremities of the body, such as the nose, chin, hands, and feet, where the circulation is carried on less vigorously than in the more central parts. Frost-bite is most likely to occur in the very young or in aged persons, or those whose constitutions have been depressed by worry and anxiety, deficiency of food, and other similar causes. The treatment requires the very greatest care, or death of the part may ensue. The sufferer should not be brought near the fire, or even into a warm room, but should be left in a cold place, and the affected part should be vigorously rubbed with snow. By these means sensibility will be gradually restored and the circulation will be re-established. The great danger is lest gangrene or sloughing should set in, which may ultimately lead to death of the part and necessitate amputation. Stimulants may be administered, but this should not be done for some time, and it is better to rely on beef-tea or a little good strong soup. Patients who suffer from frost-bite on exposure to a moderate degree of cold, should endeavour to improve the general condition of the health by strict

attention to diet, by taking cod-liver oil during the winter, and such remedies as quinine and iron from time to time.

Choking from Food, &c.—The presence of a foreign body in the throat or larynx gives rise to much pain and discomfort, which is intensified by the fact that the patient is often unable to decide exactly where it is that the substance is lodged. If by good fortune it should have stuck in the throat, it is of little consequence, for it can be readily removed. If, too, it has passed down into the stomach it will, in all probability, do no harm. The great thing in the latter case is to avoid administering purgatives, and to feed the patient on very solid food, such as suet pudding or something which will coat the intruder and prevent it from doing harm. There are curious cases recorded of people who, for a wager, have swallowed forks and spoons, and in one or two instances these have been removed by an incision through the walls of the abdomen, after the lapse of many months. The worst cases are those in which the substance has passed, not into the stomach, but into the air-passages. In the well-known case of Mr. Brunel, the eminent engineer, whose life was endangered by an accident of this kind, it arose from his performing a conjuring trick with a half-sovereign in his mouth, the coin slipping into his windpipe. A great variety of substances have been found in the air-passages; such as nuts, beans, cherry-stones, false teeth, meat, buttons, pins, fish-bones, bullets, pills, and pieces of cane. Strictly speaking, they have not been swallowed, but have been inhaled. It frequently happens that a child is detected in the act of purloining some article of food, and in the excitement of the moment takes a deep breath and draws it from his mouth into the air-passages. The symptoms produced vary according to the situation in which the foreign body is lodged, its nature, and the period which has elapsed since the occurrence of the accident. In all cases there is a feeling of suffocation, with great difficulty in breathing, and violent fits of coughing, often attended with vomiting. There is pain in the throat, and the voice is distinctly altered in character. There is depression and anxiety, and the skin is covered with cold clammy sweat. When these symptoms occur, a surgeon should be summoned at once, for in all probability an operation will be required. The patient may be inverted, and made to stand on his head, while the back is violently slapped, but this will not always succeed. The administration of an emetic is not to be recommended, as it usually not only fails to do any good, but exhausts the patient. The operation of tracheotomy, or opening the windpipe, is the great remedy; the substance being then removed with a long pair of forceps. Children should

be forbidden to play with "puff-darts," as they are often drawn back into the lungs.

Ingrowing Toe-Nail.—An ingrowing toe-nail usually results from wearing tight, pointed boots. The nail of the great-toe becomes more curved than is natural, and presses deeply into the tender tissues at the side, setting up severe inflammation. In the early stage it is readily cured by adopting a more rational form of foot-gear, and inserting a small pledget of cotton-wool in the groove on each side of the nail. It is not by any means a bad plan to let the nail grow long, and then cut out a triangular notch from the centre, so as to relieve the pressure on the sides.

Flat Foot.—A flat foot results from the arch having given way, and is met with not uncommonly in delicate children, who, from the nature of their work, have to remain standing for many hours consecutively. The feet are hot and tender, especially after walking, and sometimes perspire freely. The best method of effecting a cure is to avoid, as much as possible, walking, and especially carrying anything heavy. To restore the shape of the arch a piece of soft cork may be inserted in the sole of the boot, the foot being carefully bandaged. A metal spring in the "waist" of the boot is also useful. The fact should be recognised that this condition is to some extent dependent on general weakness and debility, and that tonics will have to be taken freely. Bicycle-riding is excellent as a means of obtaining exercise, and imparting tone to the system.

Knock-Knees usually result from a relaxed condition of the ligament of the joint. This condition is met with chiefly in young people who have overtaxed their strength in walking and running. It is readily cured by any simple device which separates the knees, such as sleeping with a pillow between them, the ankles being tied together with a soft handkerchief. Another good plan is to make the heels and soles of the boots thicker on the inner than on the outer side, so that the knees are kept apart. The boots must be strong and thick, and should be lace-up ones rather than elastic sides, as there will be less tendency for the ankles to give way.

Bow-Legs are common in children who are suffering, or have suffered, from rickets, and have been allowed to walk about when the bones were soft and yielding. As a rule instruments will not be required, but the deformity will disappear if the child can be kept off his legs for a time, being meanwhile fed on a good nutritious diet containing a fair allowance of fat. Fresh air, and, if possible, a change of air, will do as much to effect a cure as anything.

Milk and lime-water is nutritious and beneficial, and three or four pints a day may be taken with advantage.

Housemaid's-Knee is common enough among domestic servants who have much kneeling or scrubbing to do. The bag of fluid which is placed in front of the knee to protect it from undue pressure becomes swollen and enlarged, and gives rise to a good deal of pain. The usual treatment is to paint it from time to time with tincture of iodine. People who have to kneel much should take care to provide a soft pad of carpet, or some similar substance, so as to take off the pressure of the hard floor or stones.

Ulcers or Sores are very common, especially on the legs, and depend for the most part on defective nutrition of the tissue, due usually to imperfect circulation. As age advances, the heart loses much of its force, and the blood is propelled more feebly to the extremities. When the tissues are ill-nourished, a slight blow or an abrasion may be the starting-point of the mischief. Ulcers vary much in size, ranging from the diameter of a sixpence up to that of half-a-crown; and in some exceptional cases they may extend round nearly the whole circumference of the limb. They are often attended with a great deal of pain, the patient being kept awake night after night. Walking is difficult, and the general health suffers in a very marked degree. The treatment of an ulcer, especially when of old standing, requires a great deal of skill and much patience. The most favourable form of ulcer for treatment is what is called the "healthy ulcer," which is circular or oval in shape, is slightly depressed, and is covered with matter. The best way of dealing with it is to get some lint, cut it to the exact size of the sore, dip it in a weak carbolic-acid lotion (one part of the acid to about 400 of water), then lay it on the ulcer and cover it with a slightly larger piece of "oiled silk" to prevent it from drying. It is kept in place by pieces of adhesive plaster put on crosswise, the whole being protected and supported by an evenly placed bandage applied from below upwards. When the ulcer is "indolent," and exhibits no tendency to get well, its progress must be assisted by some stimulating and astringent application, such as the common "red wash," which is made by dissolving forty grains of sulphate of zinc in a pint of water and adding an ounce of compound tincture of lavender. It is to be applied on lint in the same way as the carbolic-acid lotion. The dressing should not be renewed too frequently, and usually three or four times a week will suffice. As the ulcer heals, smaller pieces of lint will, of course, be required. This treatment should be continued until there is no

sore place left, and then a pad of dry lint or a strip of plaster will afford the necessary protection. Care must be taken in applying a bandage that it is not too tight; and strips of plaster should never be put on all round the limb, or the circulation will be impeded. If by chance the ulcer, instead of progressing favourably, should become inflamed—a condition characterised by much redness, heat, and swelling of the surrounding parts, with a thick offensive discharge streaked with blood—the application of lint soaked in an "evaporating lotion" will do good. This lotion is made by adding two ounces of spirits of wine to a pint of water. As the object is to keep the part cool by insuring evaporation, the lint may be much larger than the ulcer, and it should not be covered with "oiled silk" or any other material, but simply exposed freely to the air, the lotion being applied as often as may be necessary. When an ulcer is very chronic, and assumes a "callous" condition, it is not by any means a bad plan to "touch it up" with a crystal of blue-stone or a stick of nitrate of silver.

Much attention must be paid to the constitutional condition, and when the ulcer is of any size rest in bed will usually be found essential for effecting a cure. The bowels should be kept freely open, and plenty of nourishment should be administered. The process of healing is often promoted by the administration of tabloid triturates of a third of a grain of grey powder, one being taken four times a day after meals for a fortnight or more. Cod-liver oil, by improving the general nutrition, is excellent, and the same may be said of the Kepler Extract of Malt. Certain special modes of treating ulcers are sometimes resorted to with advantage. For example, a broad india-rubber bandage may be applied evenly from the foot to the thigh so as to keep up uniform pressure. When the ulcer is due to the presence of varicose veins, an operation for their cure may be necessary. Sometimes little grafts of skin are taken from some other part of the body, or from another patient, and applied to the raw surface, where they gradually increase in size and form new centres of healing. A small ulcer may perhaps be successfully treated without the aid of a surgeon, but in the great majority of cases skilled medical assistance is essential.

Varicose Veins.—A varicose vein means a dilated condition of these vessels with thickening and degeneration of their walls, so that their power of contraction is lost or impaired. They are met with chiefly on the legs, and will be readily recognised as long thin blue lines just beneath the skin. They give rise to a great deal of pain and discomfort, and make walking difficult or even impossible.

They often arise from long standing, and their production is favoured by anything which impairs the general tone of the system. The valves after a time are ruptured, and the blood has a tendency to coagulate in large masses.

The application of an elastic stocking may do good for a time; but if not properly applied, it too often aggravates the mischief. The best internal remedy is hazeline, which may be taken in thirty-drop doses, three or four times a day, for a couple of months or more. Hazeline applied on lint often relieves the pain, and causes contraction of the vessel. In the vast majority of cases an operation has to be resorted to in order to effect a cure.

When a varicose vein bursts, the bleeding is usually very profuse, and prompt steps must be taken to arrest it, or the patient may bleed to death. In the absence of any appliances, the best plan is to press the finger firmly on the bleeding spot, and keep it there until assistance arrives. If lint can be obtained, this should be folded into a thick pad covered with collodion, and applied firmly with a bandage so as to keep up pressure. The patient should be made to lie flat on the ground, and should not be allowed to move.

Rupture or Hernia means the protrusion of a portion of the bowel through the walls of the abdomen. It is usually produced originally by some unusual effort or strain. If reducible—that is to say, if it can be returned—the best plan is to wear a truss. At the best it is an uncomfortable instrument; but usually there is no help in the matter. There are a great many different varieties of trusses, the respective merits of which are loudly vaunted by interested surgical instrument makers. It is well not to rely too implicitly on their statements, but to consult a surgeon, who will order the special form of truss best adapted to the requirements of the patient. There are many varieties of rupture, and no general rule can be laid down for their treatment. It often happens that a patient has to provide himself with several trusses, to be worn at different times and for different purposes, just as he finds it convenient to have different forms of dress instead of always wearing the same coat. For example, a truss with a strong spring may be needed for walking or riding, whilst a light truss will suffice for night when he is in bed. When the same truss is always worn, it becomes soiled and uncomfortable; whilst if there is a change, each instrument lasts very much longer, and costs less in the long run. Radical operations for hernia are now frequently performed, the patient being in many cases completely and permanently relieved of his affection.

Retention of Urine, or inability to pass water, may be due simply to nervousness, or may result from spasmodic stricture. Usually the patient makes violent efforts, which are ineffectual, and the bladder soon becomes freely distended. The countenance is anxious, the skin is hot, and the pulse is quick. Relief must be afforded at once, or there will be danger of the bladder bursting. The best remedy is twenty drops of laudanum in a little water, followed by a hot bath. The injection of a couple of teaspoonfuls of glycerine into the bowel, by producing a copious motion, may afford relief. When the condition is due to some error of diet, or to the presence of acid in the stomach, a teaspoonful of sal-volatile in water, with a drop or two of tincture of capsicum, will prove beneficial. When the condition is prolonged, it is necessary to call in a surgeon, who will pass a catheter and draw off the water. Sometimes a few whiffs of chloroform will be found the most efficacious remedy.

Incontinence of Urine.—Bed-wetting is common in children, especially those of an excitable disposition. In some families it seems to be hereditary, many members when young suffering in the same way. It is often due to the irritation produced by thread-worms in the lower bowel, and may be cured by a dose of calomel and the injection of some astringent lotion—for example, a teaspoonful of tincture of perchloride of iron in a pint of water—by means of a syringe. Sometimes it is kept up by the presence of an elongated foreskin, and circumcision will have to be performed; this operation proves beneficial in more ways than one, and may prevent such a boy from acquiring bad habits as he grows older. Sometimes a cure may be effected by making the boy get up once or twice during the night to empty his bladder. The application of a drop of flexible collodion to the extremity of the foreskin is recommended by many doctors, and often proves effectual. Of internal remedies the best is belladonna, ten drops of the tincture being given in a little water three times a day—the last dose being taken on retiring to rest. The food should be ample and nutritious, and the child should sleep on a mattress, and not on a feather bed—the bedclothes being warm and light. Especial care should be taken that the bedroom is well ventilated, and lessons should on no account be permitted for at least three hours before retiring to rest. It is not a serious condition, but is one which is often difficult to cure. It is so tiresome that it is worth taking a great deal of pains to do so.

Started Navel.—This is a common affection of young children, and if not properly attended to may

lead to the formation of a permanent rupture. The child should be laid on its back, and the protrusion carefully returned by gentle pressure with the fingers—a pad made of a slice of wine-cork wrapped in a piece of soft lint being used to retain it in its position. The pad may be kept on with broad strips of sticking-plaster, over which a tightly fitting bandage may be applied. A special form of apparatus for the purpose is sold by instrument makers; but it is not more efficacious than the simple plan here recommended, and is vastly more expensive. When the condition occurs in adults, a truss will have to be worn for some months, and perhaps permanently.

Prolapse is common in children, the bowel protruding for some inches. The best mode of treatment is to sponge it with cold water, and then carefully return it. It is sometimes caused by the presence of stone in the bladder, but it is just as often due to weakness and general debility. The administration of iron will be found useful in imparting tone to the relaxed mucous membranes. Ten drops of the tincture of perchloride of iron flavoured with glycerine may be administered in a wineglassful of water three times a day.

Tonsils (Enlarged).—Enlarged tonsils are very common in children, and not infrequently result from an acute attack of quinsy. A tendency to this complaint seems to be hereditary; at all events, it is frequently met with in several members of the same family. It is a condition which gives rise to considerable inconvenience, such as snoring during sleep, obstruction to the breathing (in consequence of which the mouth is always open), difficulty in swallowing, deafness, and thickness of the voice. These symptoms are always greatly aggravated if by chance the child catches cold, and it is a decidedly awkward complication in cases of diphtheria or scarlet fever.

The treatment consists in the plentiful administration of such remedies as cod-liver oil, extract of malt, iron, quinine, and the hypophosphites. The child should be moved to the country, and care should be taken to avoid a clay soil, which always aggravates the mischief. In the great majority of cases surgical interference will be found necessary, and the tonsils will have to be removed. This, it must be admitted, is a very disagreeable operation, especially as it is difficult to give anaesthetics on account of the bleeding; but it is better to have it done as early as possible, for delay only leads to increased trouble. It is useless to hope that the child will in time grow out of it, for it is rarely cured by medicine, and has little or no tendency to get well spontaneously.

Piles.—By piles or hæmorrhoids is meant a morbid condition of the veins of the rectum or lower bowel. This complaint is met with very commonly in young men from eighteen to twenty years of age, who are compelled by the nature of their occupation to lead a sedentary life. After middle age there is again a tendency to the recurrence of the disease, and many elderly people suffer from it persistently. A sedentary life is the most powerful factor in its production, especially if habitual “good living” be conjoined with want of proper and sufficient exercise. Intemperance with regard to the use of alcoholic drinks is another fruitful source of this complaint, and amongst other predisposing causes may be mentioned residence in warm, moist, and relaxing climates, sleeping on a soft bed, and inattention to the condition of the bowels.

Piles may be external, so that they are seen on making an examination; or they may be internal; that is to say, situated some distance within the bowel itself. One of the first symptoms to attract attention is bleeding, which varies much in quantity in different cases; there may be only a few drops after passing a motion, or there may be half a pint or more. When moderate in quantity, it is beneficial rather than otherwise; but if profuse, and occurring at short intervals, it quickly produces a condition of extreme debility. Sometimes the discharge of blood comes on periodically, occurring every month or at intervals of two or three or six months. In addition to the bleeding, the patient complains of a sensation of heat, itching, pricking, or smarting about the parts, and there may be a feeling as if some foreign body were present which ought to be expelled. When the bowels are relieved, these sensations are intensified, and are accompanied by a bearing-down pain which is peculiarly distressing. The feeling of discomfort is increased by exertion, so that the patient is unable to stand long, or even walk more than a short distance. There is often a dull aching pain in the back, referred to the lower part of the spine and extending down the legs on both sides. The general health suffers, the patient becomes emaciated, and his face presents a peculiarly anxious, drawn, and careworn look.

Many people subject to piles suffer little or no inconvenience from them until they become irritated or inflamed. This may result from prolonged constipation, from taking a brisk purgative, or from over-indulgence in wine. The inflammation is often sharp, and an “attack of piles,” as it is called, not infrequently lays the patient up for many days. Piles are not uncommonly complicated with other diseases of the rectum, such as fistula, fissure, and prolapsus.

The treatment of piles when they are small and

cause comparatively little inconvenience is fairly simple. People who are habitual sufferers should take wine and spirits, if at all, in the strictest moderation, and should be practically water-drinkers; they should take plenty of exercise in the open air, and, above all things, should avoid sitting for many hours at a desk. Chairs with cane bottoms should be used in preference to those of a more luxurious description. The use of violent purgatives is always injurious. When the piles are small, benefit is sometimes experienced from the use of an ointment of galls and opium, which must be smeared freely over the painful parts. The motions may be kept soft by the internal administration of confection of sulphur, confection of senna, or the compound liquorice powder. The usual dose of any one of these is a teaspoonful, but the patient must find out for himself the exact quantity which suits his special peculiarity. Carlsbad Salts, or Püllna, Friedrichshal, or Hunyadi-János Water, taken in the morning

before breakfast, suit many people better than anything, insuring a copious evacuation without griping or straining. The best internal remedy for piles is hazeline, an extract of the fresh bark of *Hamamelis Virginica*, the American witch hazel. The dose is a teaspoonful three times a day in water; but it has no poisonous properties, and more may be taken without fear. When the piles are inflamed, it may be applied locally on lint, the patient remaining in bed until the inflammation subsides.

In many cases, unfortunately, medicinal treatment is of no avail, and operative procedures have to be resorted to by the surgeon. Sometimes piles are cut, sometimes they are tied, and sometimes they are destroyed with the cautery. It is a serious operation, and usually anæsthetics have to be administered; but it is one of the most uniformly successful, and it is better to obtain medical treatment than to go on year after year in a condition which renders life a burden.

THE ETIQUETTE OF SOCIETY.

DIFFERENT people attach different degrees of importance to the rules and laws of etiquette. Some regard them as worthy of diligent attention and endless study, and others look upon them as unworthy of the slightest consideration, and even take a pride in openly disregarding them. If there is any truth in the old saying that "Manners make the man," it is surely unwise to act in opposition to the recognised rules which, to some extent, govern the actions of well-mannered people in society. It may not be necessary, or advisable, to learn by heart these rules; such a course would probably only lead to stiffness of manner and awkwardness of motion, which could only cause discomfort to others; but it is equally ill-advised to disregard them.

Etiquette, and the various rules in connection with it, have their origin in true politeness; and true politeness is only one of the results of unselfishness, consideration for others, and courtesy. No amount of study of the laws of etiquette can make a selfish person really polite—polite not only in society, but in every-day life; whilst some people, who are ignorant of every law and rule, are so thoughtful for others, that they are considered to be extremely polite by their friends and acquaintances. A certain knowledge and practice of these conventional laws not only tend to make intercourse with other people more agreeable and pleasant, but are very great social safeguards against undesirable acquaintances.

Etiquette has been much laughed at, and its rules have been held up to popular scorn and derision by

many people, but that is because these people have wrong ideas, and look only at the letter instead of the spirit of the law. Independent people are apt to think, that in obeying the laws of etiquette they are giving up their freedom and independence of action. They forget that it is impossible to act without affecting, in some greater or less degree, other people's actions or wishes; and that complete freedom for one may mean a lack of consideration for others. On the other hand, if any law of etiquette becomes hurtful to others, a truly polite person will break it rather than offend another. The small details which so often crop up in every-day life, must be settled by individual taste and feeling.

Etiquette and good manners are not exactly the same thing. Etiquette is a general term which chiefly means certain customs, and ways of doing things, recognised by society. Good manners belong more to the individual, and include not only good feeling, but such composure and absence of self-consciousness that, if placed in a new and strange situation, he or she would unconsciously obey the law of etiquette and do the right thing; or, if the wrong thing was done, it would be with such grace and charm that no one would notice it as wrong. It is possible to be perfectly well-mannered, and yet be ignorant of some of the minor points of etiquette.

Etiquette, from what has been said, is necessarily more or less concerned with all our intercourse—from our first becoming acquainted, to closer friendship. Hence one of the first points relates to—

Introductions.—The question of introducing people to one another is rather a vexed one, and varies to some extent according to fashion. Lately the world of fashion has dictated that introductions on some occasions are quite unnecessary, and that it does not follow that the guests at the same entertainment must be presented to one another. For ordinary people the variations in rules of etiquette dictated by fashion are not very important; the wishes of the two people concerned in the introduction are alone to be considered. If one is made to feel uncomfortable, or *de trop*, because an introduction does not take place, a mistake has been made in true politeness, even though a breach in the laws of etiquette has not happened.

The form of introduction does not vary. The gentleman is always introduced to the lady, never the lady to the gentleman; and no two persons of opposite sexes should be introduced until the lady's permission has been asked. The introduction is usually made by a mutual friend. Should the lady be seated, the gentleman must be brought to her by the person wishing to effect the introduction; she or he mentions both their names, the lady and gentleman both bow, and at once enter into conversation. It is not necessary for the lady to rise.

If it is the case of a hostess introducing her guests to one another at a dinner-party or an "At Home," a few words beyond the formal request to the lady to allow the introduction would be necessary. If the hostess wishes her guests to understand one another, and desires to put them both entirely at their ease, she will, if they are complete strangers, tell each, before the introduction, what are the chief characteristics of the other. She need not enter into a long description of each person; that would be both unnecessary and undesirable; but she can mention, in a few words, what subject is particularly interesting to the one or the other.

Unless this is done it may be difficult for both to find the most suitable topic for conversation; and two people who ought to be not only interested in one another, but who might be of use to one another in furnishing information, may waste much valuable time in making efforts to discover their whereabouts. It is very unsatisfactory to spend the first and, perhaps, greater part of a conversation in uninteresting discussion of the weather; and to discover, only when it is too late, and the company is breaking up, that the greatest interest in both lives is the same, and that a thorough interchange of ideas on that subject would have proved most interesting. A hostess can prevent mistakes of this kind, and she must never consider her duty done when she has simply introduced people, without any words of advice beforehand.

When a lady and a gentleman meet for the second time, the first sign of recognition must be made by the lady. Until she has bowed, the gentleman can make no movement. The only occasion on which an introduction is not of necessity made by a mutual friend is at a ball or dancing-party. The Master of the Ceremonies, though he were unacquainted with both lady and gentleman, would be only performing his duty if he introduced a gentleman to a lady without a partner for the dance. Even though the Master of the Ceremonies be the son of the hostess, he may not be well acquainted with all the guests, and may know some of them by name only. At the same time an introduction at a dance is not by any means as important as any other, since a lady is not bound by the laws of etiquette to recognise her various partners when she meets them afterwards.

Out of Doors.—It is not usual to introduce people out of doors, though this is not by any means a fixed rule, and must depend to a great extent upon circumstances. If a third person is made to feel awkward or uncomfortable, the introduction should be made.

Under no circumstances, however, is it considered etiquette to stand talking in the street. If a gentleman meets a lady of his acquaintance in the street he should take off his hat. If he wishes to speak with her he must continue walking in the direction in which she was going. If she is walking with a lady friend, though the friend is unknown to him, he must bow to both ladies; and in the same way if he is walking with a lady, and she bows to some one unknown to him, he must take off his hat. Also if he is walking with a male friend, and the friend meets a lady acquaintance, both gentlemen must raise their hats.

The etiquette of walking out of doors is not very elaborate, and there are few rules, beyond those of recognition, which have already been mentioned, to be given. As far as possible, when a lady and gentleman are walking together, the gentleman must keep on the side nearest the road, and he must change his place as quietly as possible, so as in no way to inconvenience the lady; though she, on her side, can greatly assist him by a little care and forethought. It used to be considered necessary for a gentleman to take off his glove before shaking hands with a lady, but this is no longer the case.

If a gentleman is riding on horseback, and meets a lady to whom he wishes to speak, he must dismount, and walk by her side.

In passing out of doors or indoors, young people must always make way for older ones, and allow them to pass first. If young and old are driving out of doors, the young people must always be careful

not to take the best seats—*i.e.*, the seats facing the horses—but to leave them for their elders. Gentlemen would, of course, leave these seats for the ladies.

Calls.—When two people have been introduced to one another, and are desirous of becoming further acquainted, the laws of etiquette demand that they should call upon one another before an invitation can be given by one to the other.

The question of paying calls is a much-disputed one. No one can deny that much valuable time may be wasted in paying calls; and some people who are busily occupied, and who do not possess spare time, announce to their friends that they do not “call.” Of late years it has been the fashion for ladies who are in the habit of receiving a large number of callers to fix certain days once a week or twice a month for receiving visitors, and on those days they make an especial point of being prepared to receive their guests. This plan has so many advantages, and so few disadvantages, that it has become very general.

The chief advantage from the caller's point of view is that she is certain to be able to pay her visit, and runs no risk of making a journey to find her friend out. The great disadvantage, however, is that she may find her friend surrounded by a large number of acquaintances, and may have no opportunity for personal conversation with her.

There is much less time wasted if one day is set apart for callers, than if friends and acquaintances are allowed to choose their own time. A certain amount of calling is not time wasted, but is necessary to keep up acquaintance and friendship. If we do not meet people in the ordinary course of daily life, unless we go out of our way to see them, unless we call upon them, we cannot hope to keep up any acquaintance with them. The question, of course, arises as to whether “calling acquaintances” are ever worth anything to us, as they are not likely to develop into friends; but this is a question which each must settle for himself or herself.

Gentlemen do not, as a rule, pay calls so frequently as ladies do. They are content to let their ladies represent them, and send their cards. When gentlemen are occupied during the day-time, they are frequently excused from calling, as the usual time for paying calls is between three and six o'clock. Between those hours ladies who are in the habit of paying calls should be prepared to receive their friends. The drawing-room should, of course, be always tidy and prettily decorated with flowers. During the winter-time the question of warming the room is always a difficulty. Economical people do not care to light a fire on the chance of a visitor coming, and nothing looks more cold and cheerless than a room where a fire has only just been lighted.

This difficulty may be overcome by the use of an asbestos stove; but these stoves are not as satisfactory for every-day use as coal-fires. If guests are expected only on certain days, it is easy to have a comfortable fire, a pretty room, a tidy maid, and a well-dressed mistress, ready to receive them; and this is the chief advantage of the fixed “At Home” day. Chance visitors should be shown into the ordinary sitting-room, rather than left in a cold drawing-room.

So much has been said at various times on the subject of not keeping visitors waiting whilst the hostess makes alterations in her toilet, that by this time every one is aware that such a course of action is impolite. Nothing is more annoying to the visitor than delay, when she has once been informed that the mistress of the house is at home, and she will care far more for a speedy welcome than a fine garment.

A formal call should not last more than ten or fifteen minutes, and if it is a first call, it must be returned very speedily. If several callers arrive at the house on one afternoon about the same time, the mistress of the house will find herself busily occupied. She should sit facing the door, so that she may see and be seen by her visitors. Directly they enter the room, as their names are announced by the servant, they will make their way to the mistress of the house, and if she is not in a prominent position, they will feel embarrassed.

A great deal of practice is needed, before perfection is attained in the art of entertaining several callers, or even two callers at the same time. If the visitors are strangers to one another, it is not necessary that they should be introduced, yet neither must they be allowed to feel neglected.

When new visitors arrive, the lady of the house must rise to receive them, and, if possible, she should give them a chair near her own, and after addressing a few sentences personally to them, she must include her other guests in the conversation. Should any gentlemen be present, they must rise also on the arrival of other people, but lady visitors would not be expected to leave their seats. If calls are made any time after half-past three, tea must be brought into the drawing-room; but afternoon tea has become so important a ceremony that it must be described later. When the visitor rises to take her departure, the mistress of the house should also rise, and should ring the bell to notify the fact to the servant, so that she may be at hand to open the door.

Arrivals in town are expected to call on their friends by way of announcing their arrival; but in the country the stranger must be called upon before she thinks of paying any calls. So also in the

country, people moving into a village may expect to be called upon by the neighbours; but in large towns, where one may live for several years next door to people and not know them, this custom is not observed.

Calls must be paid if occasions for congratulation arise, such as the engagement of a daughter of the household, the birth of a child, or the wedding of a daughter or son, when the call is made on the bride.

Cards.—Unless it is a business call, a card is not handed by the visitor to the servant on arrival, but is left in the hall before leaving. A married lady should leave one of her own cards and two of her husband's. If the mistress of the house is not at home, two cards of her own and two of her husband's should be left with the servant. As cards are occasionally left by a servant, a corner of the card turned down is a sign that the call has been made personally on all the family.

When a call is made before the departure of the family from the neighbourhood, the letters "P. P. C." (*pour prendre congé*) may be written on the right-hand corner of the card.

If a letter of introduction has been given, it should be presented with the card on the occasion of the first visit; but the person introduced should not appear. An invitation from the person to whom the introduction was given should speedily follow the acceptance of the card and letter.

In the case of a birth, special cards are often sent to the callers with "Thanks for kind inquiries" on them. These words, or others to the same effect, may be written on the visiting-card, or printed cards may be used. Sometimes a tiny card, with the baby's name printed on it in silver, is tied with white ribbon to the left-hand corner of the mother's visiting-card.

After a severe illness, cards returning thanks for kind inquiries are also sent. In the case of a death in a family, cards with a few words of sympathy written on them should be sent through the post, or left at the door. Calls on such occasions are quite out of place. After some time has elapsed, cards should be returned with a few words of thanks for the sympathy shown; these words may be either printed or written upon them. After a dinner-party, dance, or "At Home," cards must be left by the guests, who should call upon the hostess; and this should be done within a week after the entertainment, if possible. If the distances are very great, the cards may be sent through the post; but this easy method of discharging a social debt is only allowable when the distance is really great. It is not considered nearly so complimentary to the hostess to send cards by post; and when people have been at the pains to

give an entertainment which has cost time and trouble, the least that can be done in return by their guests is to call and thank them for their hospitality.

When a family removes from one house to another, cards with the new address printed in the left-hand corner must be sent to all the friends and acquaintances of the family. If the lady of the house has certain days for receiving her guests, these should be written or printed on the card. The cards should not be sent out until the house is arranged, and the family thoroughly settled, because the sending of the cards is regarded by outsiders as a signal that they may once more pay calls and visit their friends.

The cards which are used on these various occasions should be quite simple. In former times the name was written upon the card and ornamented with many flourishes; but in these days it is printed as plainly as possible. The prefixes "Mr.," "Mrs.," and "Miss" are usually placed before the name, though occasionally young unmarried men omit the prefix. A lady's card is rather larger than a gentleman's, and in both cases the address is printed in the left-hand corner. Gentlemen usually supply themselves with business cards and private cards. Any honorary or official designations appear only on the business cards. Husband and wife require separate cards, and should not use one card with both names written on it.

If there is an unmarried daughter of the house old enough to pay calls with her mother, the daughter's name should be printed underneath that of her mother, or it may be written in the left-hand corner. If the daughter is the eldest, the Christian name is omitted; and if there are more than one daughter, they appear as "The Misses."

The card-tray should be put in a conspicuous place on the hall-table, or there need be no special receiver provided, and the cards may be placed on the table itself. When cards only are left, and no personal visit is made, the call must be returned in the same way. Formal calls are interchanged at least once a year, and must only be made between the hours of three and six; calls before luncheon can only be made by very intimate friends or relatives.

Five o'clock Tea.—As has been before stated, some time during a call tea should be offered to the guest. Five o'clock Tea has become quite an institution of recent years, and is growing more and more popular. Though it is called "Five o'clock Tea," it does not by any means follow that it is only taken at five o'clock. It may be provided any time during the afternoon. Most people arrange before-

hand that a caller shall be understood to be the signal for tea; and as soon as the caller has been in the house a few minutes, the tea-things appear, without any apparent sign from the lady of the house.

Ever since its first introduction, Five o'clock Tea has been growing more and more elaborate. At one time it was considered sufficient if cups of tea were brought in on a tray and handed round by a servant; then the teapot itself appeared in the drawing-room; and now the most correct thing is for the tea to be made upstairs.

This arrangement is, indeed, a great change from the times when cake and wine were handed to afternoon callers; but it is a very sensible one. Wine is not needed in the afternoon, and is not nearly so acceptable as a cup of freshly made tea. Doctors tell us that tea is unwholesome, but they grant that it is most refreshing; and people gladly drink it for the latter reason, and lose sight of the former.

If Five o'clock Tea is to be made thoroughly enjoyable, the necessities connected with it must be as pretty and inviting-looking as possible. Small tables provided with shelves for bread-and-butter and cake plates are sold everywhere (see Fig. 4, p. 9). They are very light, so that they can be easily lifted; and if prettily decorated with a table-cloth, and a plant or vase of flowers, help to ornament the room when they are not in actual use as tea-tables. Before the tea-things are brought in, the plant and table-cloth are easily removed, and the afternoon tea-cloth, prettily worked, may take their place.

The china must be dainty, and the tea-cosy should be pretty and handsomely decorated with embroidery. A kettle with a spirit-lamp will also be needed, if the tea is to be made by the hostess. The water should be nearly boiling when it is brought into the room, so that it will boil up in a few minutes. Stands for kettle and spirit-lamp (as shown in the figure) have recently been introduced, and they are very convenient. They stand on the floor, about as high as the afternoon tea-table. They give more room on the table, and are more easily got-at-able than the ordinary table-stands; but they are rather expensive.

If there is no kettle and spirit-lamp, the tea must be made by the servant; but this cannot be quite as satisfactory, and the tea does not somehow taste quite as good. It is, however, very much better to be brought into the room in a teapot than in cups. The last-named arrangement is the worst plan of all.

Bread-and-butter cut very thinly and rolled, and

cake or biscuits, are the only eatables necessary for Five o'clock Tea; but the cake and bread-and-butter must both be the best of their kind. As soon as the tea is made, the lady of the house pours it out, and hands it to her guests. If there are grown-up daughters in the room, one of them would probably undertake this duty. If any gentlemen are present, they should endeavour to assist the hostess in passing cups and saucers, and plates of bread-and-butter. If the hostess has no one to help her, she should endeavour to supply all the wants of one person before attending to a second. If there are several callers, and the hostess first gives every one a cup of tea, then passes round the cream, and then the sugar, the tea will be cold and undrinkable before the bread-and-butter arrives.

When every one is supplied, the lady of the house must provide herself with a cup of tea, which she can enjoy until the time arrives to once more assist her guests by offering them second cups.

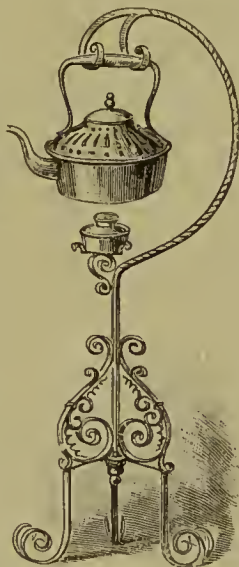
During the whole process of the making and pouring out of the tea, the conversation must not be allowed to flag for one instant, and no guest must be permitted either to engross too much attention or to be neglected. Tact, practice, and some skill are needed to accomplish these various duties successfully; but on the whole the process of the tea-making and tea-drinking will be found much more of an assistance than a hindrance. There should be no delay in bringing in the tea-things in the first instance. If fifteen minutes is to be the limit of the call, the tea must

appear very early in the proceedings, as it will take a little time to make and to drink, and the visitor may be made uncomfortable if she feels that her call is of too long duration.

So popular has Five o'clock Tea become, that occasionally invitations are issued for this entertainment, and ladies invite each other to spend the afternoon and drink tea together. A Five o'clock Tea party may be made very enjoyable both to hostess and guests. It is quite an informal party, and is most inexpensive, and the only entertainment provided is tea and talk.

It is a convenient arrangement by which friends living at a distance are able to spend a little time together, without any formal invitation, or entertainment being provided.

Afternoon At Homes have probably grown out of Five o'clock Teas. They are the more formal entertainments of the two, and they require more preparation and forethought. To a certain extent



KETTLE AND STAND.

they are conducted very much in the same way as Evening At Homes. Invitations are issued to as many people as the rooms will conveniently hold. If a large number is expected, the hostess will be far too busily occupied to make the tea herself. She will be engaged in making introductions, and looking after her guests, and will not be able to give her time to kettles, hot water, and cups and saucers.

If possible, the tea should be served in a room adjoining the drawing-room, not in that room itself. If there is no daughter in the house, a friend should be invited to assist, rather than that the important office of pouring out tea should be filled by a servant.

Each guest on arrival should be shown into the tea-room, and afterwards into the drawing-room. Ladies appear in their bonnets and outdoor garments on such occasions, but the gentlemen leave their hats and coats in the hall, or in some ante-room used for that purpose.

The invitations announce that the hostess will receive her guests between certain hours, and all who accept those invitations should appear some time during those hours; after staying a short time they should take their departure.

The meal provided on such an occasion would be rather more elaborate than a Five o'clock Tea. No kind of cake, fancy bread, or tea-cake would be in the least out of place. Coffee should also be prepared for the guests, especially if there are any gentlemen expected as they usually prefer that beverage to tea.

If it is a large Afternoon At Home, cards should be left by the guests in the hall, as after an ordinary call. Occasionally a series of Afternoon At Homes are given, and a choice of dates is offered to each guest. If for a good reason any one is prevented from appearing on any of the occasions, cards should be sent on the last date mentioned.

Invitations.—After an introduction has taken place, and the first formal call has been paid and returned, the next step which must be taken is an invitation of some kind, if it is considered desirable to cultivate the acquaintance. The various forms in which invitations should be issued are governed by the laws of etiquette.

Care is needed in framing the form of an invitation. It must be complete, nothing must be omitted, yet it must be short. In spite of its brevity, it must clearly define several points to the person to whom it is addressed. If an invitation is properly written, the invited guest will know at once not only the day and hour at which the entertainment is to be given, but exactly the kind of entertainment that will be set before him, as well as the style of dress which he

is expected to wear, and the form that his reply to the invitation must take.

Nothing is more annoying than to receive an ambiguous invitation; to be in doubt as to whether the hostess desires her guests to appear in full evening-dress or in demi-toilet. It is tiresome to have to write for further particulars, yet still more tiresome to appear on the evening unsuitably attired. An evening's enjoyment has been spoilt before now, because the invitation was ill-expressed and badly drawn up.

If invitations are written, the hand-writing must be neat, clear, and legible. The date must be clearly written; if in figures, these must be distinct, to allow of no mistake between a five and a three. Many invitations for formal gatherings are printed on cards nowadays. Either special cards are printed for the occasion, or cards with "At Home" printed on them, and spaces left for names and dates, are used.

All invitations for large entertainments are written in the third person. Invitations to dinner-parties are frequently written in the first person; this form is more convenient, and seems, perhaps, more friendly. The only danger is the question of the style of dress. It is usual, however, for the hostess to mention in such an invitation the names of the other guests expected; and if this is done, the guest would at once understand that the invitation was to a dinner-party, and that evening-dress would be necessary. It is very easy in a few words to intimate whether the invitation is issued for a regular party or only a quiet dinner; but in some way this must be done.

If a dinner-party is a very formal one, or if the guests are strangers, the invitation must be made in the third person; and, if it is a very ceremonious one, on printed cards. Dinner-invitations should be issued in the name of the host and hostess; and if written, care must be taken in the spacing:—

*Mr. and Mrs. Robinson
request the pleasure of
Mr. and Mrs. Johnson's
company at Dinner,
on Friday, February 16th,
at half-past 7 o'clock.*

74, Park Road.—January 9th.

The above is the usual form for a formal dinner-invitation, if written. It must be replied to in the same way in the third person, and should be answered promptly and definitely.

All invitations should be accepted or declined as quickly as possible. It is not only impolite, but most thoughtless and inconsiderate, to keep people waiting for an answer to an invitation. Householders who give an entertainment are generally

wishful to invite a certain fixed number of people to it, and if two are unable to accept the invitation, two more must be speedily asked. If those who are invited cause any delay in answering the invitation, they must also cause great inconvenience to the host and hostess, and they should bear this in mind. For the same reason the reply should convey a definite acceptance or refusal, and must not leave the invitation open. It should be worded in one of the following ways:—

Mr. and Mrs. Johnson
accept with pleasure
Mr. and Mrs. Robinson's
kind invitation for
Friday, February 16th.

The Cedars.—January 18th.

Or, if acceptance is impossible,

Mr. and Mrs. Johnson
greatly regret that a previous engagement
must prevent their accepting
Mr. and Mrs. Robinson's
kind invitation for
Friday, February 16th.

The Cedars.—January 18th.

In accepting an invitation the form must always be "accept with pleasure," not "will have much pleasure in accepting." The mistake is often made of using the future instead of the present tense of the verb. This is incorrect, because, though the invitation is for a future time, it is accepted at the present time, and so the present tense must be used.

If the invitation is written on note-paper, headed with the address, the date only will be written in the left-hand corner of a card, or below the invitation.

If the invitation is written in the third person, it must be answered in the third; if in the first person, the reply must also be written in the first person. It is perhaps unnecessary to remark that the same person must be used throughout the invitation. It must not be worded thus:—"Mr. and Mrs. Johnson request the pleasure of *your* company."

For almost every other kind of entertainment, the form of the "At Home" invitation is used, and the particular form of entertainment is notified by a few words or a single word in the left-hand corner. Invitations to an "At Home" of any kind are issued in the name of the hostess only:—

Mrs. Robinson,
At Home,
Friday, February 6th.

Dancing, 8 o'clock.

74, Park Road.

The above would be the form used for a dance. The name of the person to whom the invitation is sent may be written at the top of the card, or the name may only appear on the envelope. "Music," "Dramatic Performance," "Lawn Tennis," &c. &c., may be substituted instead of "Dancing," or the address might be put in the left-hand corner.

Cards with "At Home" printed upon them can be bought for a mere trifle, and cards of some kind are always used for dancing-parties and "At Homes." The cards must be quite plain, without ornamentation. If more than one member of a family is invited, a separate card must be sent, though it would be quite allowable to write "The Misses" on one card.

The letters *R.S.V.P.* (*Répondez s'il vous plaît*) are occasionally added, but they are scarcely necessary for any formal invitation, as a reply should always be sent.

If the "At Home" is given in the afternoon, two hours may be mentioned—as "*From 4 to 7.*"

If a refusal has to be sent to a formal invitation, it is most polite to send a formal refusal, together with a short note stating the reason for the refusal, and regret at being obliged to decline the invitation.

If a dance is to terminate at twelve o'clock, the word "Cinderella" should appear on the card, to notify the same to the guests; or if the hostess desires them to appear in costume, "Fancy Dress" must be mentioned.

The length of notice which is given of an entertainment varies according to the size and importance of the entertainment. The more ceremonious and the more formal a gathering is to be, the longer must the notice be; and those invited will get some idea of the kind of entertainment by the length of notice given them. As a rule, invitations for a dinner-party would be issued a month beforehand; whilst a fortnight would be considered sufficient for a private dance or an "At Home." An invitation with short notice should only be sent with an apology. It is not considered complimentary to give a very short notice of an entertainment in an invitation, because there is much less certainty of those invited being able to accept it.

If an invitation is declined, a call must be made all the same, within a week of the day on which the entertainment was given.

Before leaving the subject of invitations and writing invitations, it may be well to say a few words as to the etiquette of "Letter-writing."

Letter-writing is no longer considered so important an art as it used to be. When a letter cost more money to send, fewer letters were sent, and those few were very elaborate, and much time and

labour were bestowed upon them. Nowadays there is so much writing, so many notes are written by one person in the course of a day, that too often there is no care taken over them, and the writing is not only bad but illegible, the paper is blotted, and the thoughts ill-expressed.

We fancy that we cannot give the same amount of time to letter-writing that our forefathers did, and letters are too often written carelessly and hurriedly.

In writing a letter, the first endeavour should be to make it legible, the second to write clearly and simply on such subjects as are likely to be interesting to the person to whom the letter is written. We should endeavour to write as we try to speak, as naturally as possible. A business letter must of course be short and to the point; but if the letter is intended to give pleasure, it must be bright, full of interesting news, not too many "I's" in it, and, in fact, worth receiving, and calculated to inspire, at any rate, interest. People away from home are always glad to receive news, and as a rule rejoice in detail, and a kind action will be easily done if an interesting letter is sent to a home-sick friend.

The address should be written at the right-hand corner of the sheet, with the date below it. Very often the address is printed on the paper. Fashions in letter-paper change daily, and it is quite impossible to keep up with them. If the paper is good, easy to write upon, and plain, nothing more is necessary.

The letter should not be commenced too high on the page. It is well to think, before beginning to write, how much space is likely to be needed. A short letter, if possible, should be ended on the first page, and the ending should never be allowed to appear by itself at the top of the second sheet. Punctuation must not be forgotten, and "crossing" should be avoided. If letters are crossed, they are more difficult to read, and difficulties are put in the way of the recipient, when the wish is to give him or her pleasure. The signature should be most distinctly written, especially if the letter is to a stranger. Sometimes people who sign their name forget that it is not as well known to other people as it is to themselves, and they get into a careless way of writing it. They are not pleased if they get a wrong spelling of their name in return, and are apt to forget that they alone are to blame for it. The address and the signature should be written as plainly as possible.

The same form of signature may be used for every one, if it is a simple one; or it may be varied according to whom the letter is written to. The initial of the Christian name and the surname are sufficient for ordinary letters; but if the writer is a lady, she

would do well to put "Miss" or "Mrs.," as the case may be, in brackets by the side of her name, and thereby save absurd mistakes and confusion.

The letter must be folded to the size of the envelope it is to fit. It should be folded so as to open conveniently. At the present time, what is known as the "Court"-shaped envelope is generally used. For this, the letter need be folded once only; but it should be so arranged that when the letter is opened the commencement of the note will be at the top, and the letter will not have to be turned round or over before it can be read. The envelopes and paper should match; if the one is coloured, the other must be coloured also—not white.

The direction on the envelope should be exact, full, and clearly written. The Post Office authorities have often great difficulty in deciphering letters which are indistinctly written, and many letters are delayed through the direction on them being inexact. A mistake in a number may cause the loss of an hour, and the substitution of "road" for "street" the loss of a day. If the letter is addressed to a gentleman, the initial of the Christian name should be carefully noted. There are often two or three gentlemen in one household; and as at the present time every one is called "Esquire," the initial can be the only distinction.

Letters which are likely to be too heavy should be weighed. It is no compliment to send a letter under-stamped, and oblige the person to whom it is addressed to pay for his treasure. There should be a letter-weigher in every house; and if there is none, the letter must be weighed at the Post Office.

Letters in wrong envelopes have caused great confusion; the mistake may be as easily avoided as it is made. No letter should be sealed until it has been read over; and if it is then put straight into an envelope, directed, and sealed, it is not likely to cause further trouble. Unfastened letters and undirected ones are of course very unfortunate mistakes, which do not occur to careful people.

Care should be taken in the beginning and ending of a letter. Intimate friends and relations may choose any form they please; but with strangers and acquaintances conventional forms should be adopted. To a total stranger the correct form of address would be "Sir" or "Madam," if the letter is a business one. "Dear Sir" and "Dear Madam" are rather less cold and distant, and are sometimes used; but "My dear Sir" or "My dear Madam" should only be used when there is some amount of familiarity. The conclusion of the letter may vary considerably. Most people adopt one form or another, and always use that one. "Yours truly" or "Faithfully yours" will do very well for a stranger. "Sincerely yours" for an acquaintance, and "Affec-

tionately yours" or "Yours affectionately" for a close friend or relative.

In writing a formal or business letter, in the beginning of which the name of the person to whom the letter is sent is not mentioned, it is usual to write "To A. B. C. Robinson, Esq.," in the left-hand corner at the bottom of the page, or else at the top of the letter.

A firm would be addressed as "Gentlemen" instead of "Sir," as more than one individual would be addressed. As has before been stated, it is considered complimentary at the present time to address every one as "Esquire." Tradesmen are sometimes only addressed as "Mr.," but all people in their private capacity are honoured with the title of "Esquire."

Married ladies, as a rule, are addressed as "Mrs. Smith" and "Mrs. Robinson;" though if there are several sons married, the husband's Christian name would be introduced. The eldest daughter in the family is addressed as "Miss;" but the other daughters require the initial of the Christian name, if not the whole name. A son possessing the same initials as his father would be addressed as "A. B. C. Robinson, Junior, Esq." All titles or degrees should appear on the envelope, either before or after the name.

As it is convenient to know the recognised forms of address to persons of various rank and position, a list is given below:—

A Clergyman of any denomination is addressed as "Sir" or "Dear Sir," and the envelope should be directed to "Rev. John Robinson." If the initial is not known, the letter is not addressed to the "Rev. Mr. Robinson," but to the "Rev. — Robinson."

A Doctor of Medicine or a surgeon should be addressed as "J. Robinson, Esq.," with the degree afterwards, whatever it may be.

A Doctor of Divinity is addressed as "Rev. Dr." or "Rev. R. Brown, D.D."

A Bishop should be addressed as "My Lord Bishop," and the envelope is directed "To the Right Rev. the Bishop of —"

Judges are addressed as "Right Honourable."

Knights are addressed as "Sir John —," and baronets as "Sir John —, Bart."

Barons are addressed "To the Right Hon. the Lord —" on the envelope, and the letter should begin "My Lord." A baroness in the same way would be addressed as "The Right Hon. the Lady —," and the letter should begin "Madam."

A Viscount is addressed "To the Right Hon. the Viscount —," and the letter should begin "My Lord."

An Earl.—"To the Right Hon. the Earl of —," and "My Lord."

A Marquis.—"To the Most Noble" or "the Most Hon. the Marquis of —," and "My Lord Marquis."

A Duke.—"To His Grace the Duke of —," and "My Lord Duke."

An Archbishop.—"To His Grace the Archbishop of —," and "My Lord Archbishop."

Members of the Royal Family as "Royal Highness," if sons, daughters, uncles, or aunts, of the Queen; and "Your Royal Highness," if nephews or cousins of the Queen.

The Prince of Wales.—"To His Royal Highness the Prince of Wales," and "Sir."

The Princess of Wales.—"To Her Royal Highness the Princess of Wales," and "Madam."

The Queen.—"To the Queen's Most Excellent Majesty," and "Madam."

Widows of peers receive the title of "Dowager" if the successor to the title is married, as "Her Grace the Duchess Dowager of —." The younger sons and daughters of dukes, marquises, and earls are addressed as "Lord" and "Lady;" but the younger sons of viscounts and barons are addressed as "The Hon. —." Privy Councillors take the title of "Right Hon.," and drop that of "Esq."

Civil or honorary distinctions precede degrees, and examination titles honorary ones: thus the order should be C.B., M.D., or M.D., F.R.S., or "The Hon. and Rev.," or "The Hon. Lieut.-Col.," &c.

Dress.—Much has already been said about the etiquette of dress. Some care and thought is needed to dress suitably on all occasions, and no one can doubt for a minute that this is most desirable, for to a great extent our manners and conduct are influenced by the clothes we wear. A person who is conscious of being well and fittingly dressed is much more likely to be perfectly at ease than one who is only too well aware of the inappropriateness of the costume worn; and, therefore, in issuing invitations, as has already been stated, the style of dress must be indicated by the form of the invitation. An invitation in the third person indicates that full dress is to be worn. A dress for a dancing-party should be of light colour and light material, and gloves must be worn by ladies and gentlemen. A dinner-dress may be of any dark or light handsome material, and gloves must be worn by the lady, but should be removed before the dinner itself commences. For the sake of convenience mittens are used occasionally instead of gloves. An Evening At Home requires full-dress, but at an Afternoon At Home the ladies do not remove their bonnets.

At picnics and excursions, light summer dresses are worn; and at tennis or boating parties, flannel or serge dresses are worn, especially made for such engagements.

At a garden-party the dress must be light and bright, and the bonnet or hat equally so.

Whatever the occasion, the dress must be neat and suitable. As a rule, bright showy dresses should not be worn in the street; and no lady should be so dressed that she attracts public notice and attention.

A lady paying a call should leave her umbrella and cloak, if she carry one, and a gentleman his

walking-stick, in the hall. Out of doors a lady is never seen without her gloves, and the gloves must be put on before she leaves the house; but a gentleman is permitted more licence.

A young lady should never wear much jewellery. Valuable rings are out of place for every-day wear. On occasions of ceremony jewellery is handsome and becoming, but a display of precious stones on ordinary occasions is only vulgar.

THE VENTILATION OF THE HOUSE.

It is only of late years that the paramount importance of pure air has been understood. It cannot be too widely known that consumption, that dreaded scourge of civilised races, is not a disease due to cold air or damp air, but to *confined* air. Cold and damp may cause bronchitis, or pneumonia, or rheumatism; but they do not directly cause consumption, which is, speaking broadly, due to breathing air which has been, more or less, already breathed, and therefore contains both products of combustion and emanations from the body itself. It is probable enough that the products of insensible perspiration have also effect in poisoning confined air; but the main thing undoubtedly is that the air has been *breathed*. Hence it is that when we civilise the savage, or compel him to live in houses, the change from the free open air to that of rooms kills off the race by consumption. For years the more "delicate" animals in our Zoological Gardens perished quickly—it was supposed, from our cold climate; their cells were carefully warmed, and it was no better, but even worse; at last the cells were freely *ventilated*, and the mortality either ceased or greatly diminished. Statistics of our gaols, and barracks, and great institutions, are still more emphatic to the same effect; and it was actually shown by the Army Commission of 1858 that the mortality of the British army when it was in the huts before Sebastopol, during twenty-two weeks ending May 31, 1856, with all its hardships, and including deaths by violence and accident (not in the field), declined to 12·5 per thousand per annum, against 17·9 in the infantry and 20·4 per thousand in the Guards when barracked at home. The *pure air* made all the difference; and medical men now prefer to treat all ordinary cases in isolated tents or huts, where they can have this powerful assistant, than in the best-appointed ward within four walls.

Even yet, however, the subject of ventilating houses is not thoroughly understood, and, to say the truth, presents very formidable difficulties which can hardly be said to be overcome. Very recently the present writer, whilst taking a tricyclo-ride not very

far from London, was shown a house near the road which had been built under the superintendence of an architect supposed to be an authority in these matters, and which by desire of the owner had been specially planned with a view to ventilation. The result was, that before it had been inhabited six weeks the mistress told her husband she could not possibly live in it. She was a martyr to agonising neuralgia, the cause of which was clear in the frightful draughts which were too plainly felt by even the hardier inmates. What was ultimately done we never heard; but certainly the first result of this *bonâ fide* attempt at perfect ventilation was not a success. On the other hand, we very recently slept in a house the ventilation of which seemed perfect, except that we were told there was sometimes a very slight draught perceived in winter when the wind was in one particular quarter. Tobin's tubes were in every room, bedrooms included; and the air was perfectly fresh and pure.

Difficulties of Ventilation.—The difficulty of the problem lies in its essential conditions. Polluted air has to be removed, and, to replace it, fresh air has to be introduced. That means *movement* of the air; rather, indeed, it absolutely *is* movement of the air, at a rate depending upon the quantity which has to be renewed. And whenever we come in the way of moving air which is colder than the temperature of the body, we feel what is called a draught, and are liable to suffer its consequences.

Frequent failures like that above indicated, prove that it is utterly impossible to lay down any cut-and-dried plan for ventilating houses. It is found that methods successful in one case are failures in another; and we are sure it will be most generally useful, having shown first what the difficulty is, and before describing various contrivances in detail, to make intelligible the *principles* upon which the architect or householder must proceed in overcoming that difficulty.

Remember what it is. To renew the air we must

move it; and if this motion is perceptible, and the moving air is colder than the body, we have a "draught," and get toothache, or catarrh, or bronchitis, or perhaps worse still. We must obviously seek the remedy in one or the other of certain expedients, or in several of them; and the success with which they are employed will be the measure of our success in avoiding the otherwise unpleasant effects of our ventilation.

Enumerating them briefly and generally, the chief means of avoiding cold draughts in ventilating a room or a house are as follows:—(1) We may *warm* the fresh air admitted, so that it shall have no ill-effects. (2) We may arrange the draught so that where it is chiefly felt, people only momentarily come in the way of it, and at least never sit or stay there. (3) We may so dilute, or check, or "slow" the draught by diffusion, that it is not felt by those in contact with it. This is very much the same thing as No. 2, but is at least another way of putting it. What is meant may be understood by a very simple experiment. In one end of a piece of india-rubber tube, fit a taper piece of metal tube with a small orifice. If now air be blown into the large end, quite a perceptible blast will be felt if the small end be directed on the back of the hand. But if the small end be blown into, and the large end directed on the skin, it will be hardly perceptible; the blast through the orifice is so much diluted or diffused, and thereby *slowed* in the larger part, that it is hardly felt in comparison. Yet the same quantity of air is passing in both cases.

Hence comes the special difficulty of ventilating a *small* room without draught; there is hardly room for diffusion away from the occupants, and the air has to be so frequently changed. When it is remembered that a person, to be kept in full health and vigour, requires at least 2,000 feet of fresh air per hour—some doctors say 3,000—and that only lately has this been fully recognised, it need not be wondered at that we still have much to learn, and that it is not always easy to ventilate rooms without ill-results. But it is beginning to be understood that it will have to be done; and meantime, for want of it, most of us in towns never really know what health means. When we say we are well, we are no such thing; and did we only live in pure air, we should feel an access of appetite, and vigour, and pleasant animal spirits of which, as it is, we have no idea.

With these remarks, which are subject to selection in their application to each individual case, we may consider in detail the most generally accessible methods of ventilation.

Inlet and Outlet.—We require to have sufficient inlet for fresh air, and outlet for foul air; and

it is easy to see that one must approximately equal the other, the surplus being inoperative. It is no use providing outlet for the foul air, if there is no ingress for fresh air to take its place; if we do, the foul air *won't go*.

We have one simple law to help us and guide us. Both burnt air and breathed air are of course *warmed* air, as compared with any healthy temperature of a room. And warmed air, we know, ascends. Broadly speaking, therefore, we want our outlets to be as near the top of the room as possible. As a rule the inlet should be lower down; but as colder air will descend of itself if circumstances at all favour it, this is not so necessary; while inlets actually near the floor are objectionable, causing inevitable draughts and cold feet. How necessary the outlet is, may be realised by any householder who will have a step-ladder brought into a sitting-room whose ventilation is unattended to, two or three hours after it has been occupied, and the gas lit; and stand on it so that his or her head is near the ceiling. It will be felt at once that the air there is *poison*, which gradually, creeps lower and lower as it collects. That is what kills canaries so rapidly, hung up as they are in this fetid atmosphere above our heads, so that they feel it before we do. Our rooms would be uninhabitable, or 50 per cent. of us would die of consumption, were it not the fact that, besides accidental chinks at the window-frames and doors, and the draught of the fireplace, an amount of air beyond what most people have any idea of, actually permeates through the walls, and between the boards of the floor.

It is easy to see the folly, therefore, of trying to stop every particle of draught from entering under doors or at the sashes of windows, much more of stopping up a chimney during the summer months. Such immunity from draught is dearly purchased, when there is no other means of ventilation provided.

Simple Valves.—The simplest kind of inlet or outlet is a plain valve, controlling an aperture cut in one of the walls of the room, and leading either to the outer air (in which case what is called an "air-brick" is built into the outer side of the aperture, at the surface of the wall) or into the chimney-breast. When the valve opens inwards to the room, pointing upwards, it is known as the "Sherringham Valve" (Fig. 1) and is very common. Sometimes, when there are two outer walls to a room, two of these valves are arranged close to the ceiling, when one will act as an inlet and one as an outlet—which is which, depending on the direction of the wind, or which is the warmest side. Fig. 2 shows this action of two Sherringham valves; but the arrangement, though very cheap and easy to adapt where suitable, is only so in a comparatively small number of cases. In a small room there

is too much direct current between the two valves. The slope of the valve directs the incoming current



Fig. 1.—SHERRINGHAM VALVE.

towards the ceiling before it can descend, and in this way generally dilutes and destroys any direct draught.

The "Arnott Valve" is practically just such a valve reversed, so that it opens *out* of the room. It is set in the breast of the chimney, close to the ceiling, the upward draught of the chimney assisting to draw away the heated and foul air. This was one of the very first efficient means of ventilation invented, and it has been allowed to go too much into oblivion; for as regards outlet only, it still remains one of the very best, simplest, and most generally applicable. Dr. W. B. Richardson has very lately published his opinion that "the chimney-draught forms the *best* exit for the sitting or sleeping room, and the Arnott exit-valve into the chimney near the ceiling is efficient." It never fails while the draught in the chimney is good; and only when the chimney fails in this during some direction of the wind, as some chimneys will, does smoke occasionally beat back into the room. For such emergencies the valve may be closed by a cord, just as in the converse

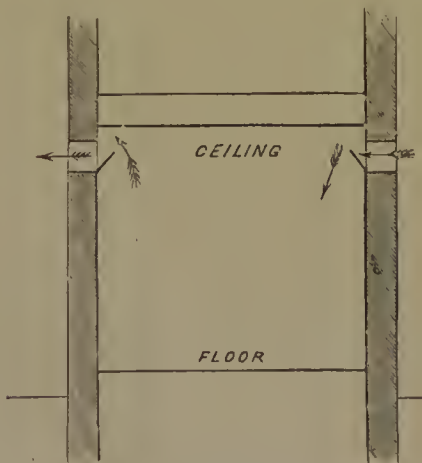


Fig. 2.—TWO SHERRINGHAM VALVES.

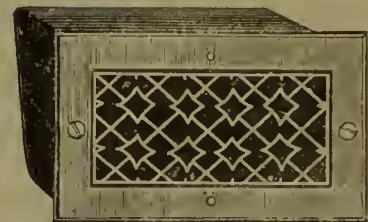
Sherringham valve. This can, however, be almost always prevented by (1) setting the valve in an aperture made in the very top of the wall, *close* to the ceiling, where the upward pressure of heated air

is strongest; and (2) carrying the outlet in the wall itself, not horizontally, but at an *upward slope*, into the chimney. One of the best forms of the Arnott valve, however (for such it really is), provides automatically for this, and is known as "Thomas Boyle's Patent," a front and back view of which are shown in Fig. 3. The front of this ventilator is here a perforated plate, fixed flush in the wall of the room; the valve is made multiple, and consists of thin plates of mica, so balanced that they close with the slightest tendency to down-draught. There are few rooms to which such an outlet is not applicable.

Shaft Outlets.—Where gas is used, many attempts have been made to provide an outlet for the hot foul air, by perforating the ceiling over the gaselier, and leading it away to the outer air. In



Inside.



Outside.

Fig. 3.—BOYLE'S MICA-FLAP VENTILATOR.

some few cases it succeeds merely to use the space between the ceiling and next floor as a flue, fixing an air-brick in the outer wall; but this can only be when this wall has an aspect almost always sheltered from the wind; if ever the latter strikes on it, cold air is blown down and a draught is felt. But if a shaft can be carried up from the opening, protected by a cowl, or ultimately going into a chimney, this is a good place for an outlet, and the burnt gas will help to draw off the other foul air of the room, as will be shown in the chapter on Gas-Lighting. If, however, no inlet be provided, such a shaft will be inoperative, or comparatively so. Fresh air *must* come in to replace air drawn out, and so there will be confusing downward currents in the shaft itself, which will take a great deal of foul air back into the room. This can be entirely avoided by making a *partition* in the shaft, when the air will always flow *up* one division and *down* the other, and thus a room may be ventilated from one shaft alone.

The best form of this expedient is shown in Fig. 4, illustrating the principle of what is known as "McKinnell's Ventilator." Here the partition is circular, the area of the inner tube and outer ring being equal. The inner tube is always carried up higher than the other, and if convenient, a very few feet with a cowl on the top is generally sufficient. This

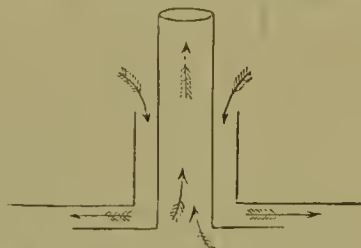


Fig. 4.—McKINNELL'S VENTILATOR.

forms the outlet, while the outer ring forms the inlet, the fresh air being prevented from flowing directly down, and dispersed on all sides by a flange, so diluting the current, and making draught imperceptible. It is a most useful form of ventilator wherever applicable, but unfortunately a great many rooms will not allow of such a shaft, and still fewer allow of the inlet being properly arranged. Practically, indeed, this ventilator is almost restricted to rooms whose roofs are open to the sky, but to nearly all such cases it is eminently suitable.

Boyle's, Buchan's, and many other shaft ventilators allow of a metal flue being carried up the side of a house or chimney-stack. But most of such contrivances are limited to special rooms, for obvious reasons; and the Arnott valve remains the most generally applicable outlet of any.

Windows.—A great deal may be done by window ventilation. Indeed, a great deal *is* done, for in nearly all there is a very considerable chink between the two sashes at the middle of the window, and we owe more to this than we think. A window should never be made to fit too well; and here it may be as well to explain that a great deal of what people call the "draught" from a window is no draught at all. On a cold day you go near a window, and feel what you think is a "draught." It is nothing of the kind—that is, most of it is not—a little there may be, and ought to be. The simple fact is that the large thin pane of glass *becomes very cold*, and the heat is radiated from your body to it as soon as you come near it. It *feels cold* to you, and this feeling you put down to a draught; but it would be about the same if every chink were stopped hermetically; and you would feel the same draught half a yard from a slab of ice a yard square. Do not condemn the ventilation for what is not its fault at all.

But more can be done with a window. If we

pull down the top a few inches, and lift the bottom sash the same, cold air will come in at the bottom, and the warm air go out at the top. Both currents will be much stronger; and that is why, as all intelligent housekeepers know, the air of a room is freshened so much more quickly when *both* sashes are thus displaced. Always do this when possible, and a thorough change of the air is desirable, and especially when airing the bedclothes, in any but heavy wet weather. If only all windows were built so as to reach the top of the room, we could do finely; but, unfortunately, very many are not, and do not let the foul air escape beyond their level, so that we must not forget the Arnott valve. Still, it is so easy to pull down the top sash a few inches; and the great majority of people, by beginning in summer, and taking pains with bedclothes, &c., could learn to live thus with ease and facility, to their vast benefit.

Still more often may window ventilation be employed in a sitting-room. Dr. Parkes strongly recommended a plan shown in Figs. 5 and 6, Fig. 5 showing the top and bottom sashes in their usual position. Let us now raise the bottom sash, say six inches, and fix a piece of board to the lower sill, so as to stop the bottom space and prevent direct draught from it. This is shown at A, Fig. 6, and it will be seen at once how a space is left between the sash-frames at the middle of the window, whereby quite a good stream of fresh air enters at B. And this air is necessarily so thrown into an *upward* current by the position of the sashes, and so diffused in the room



Fig. 5.

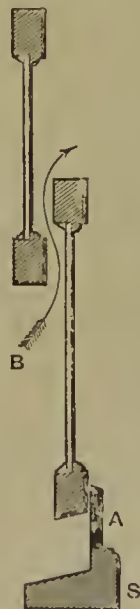


Fig. 6.

before it comes into contact with any one, that practically there is hardly any draught. This method is used in hospitals a great deal.

When we draw down the top sash, we have a similar *inlet* at the middle of the window, while the top space forms an outlet. This greatly increases the efficiency of a window opened at the top; indeed, were it not for this double action, a window only open at the top for a few inches could have very little effect.

Mrs. Priestley employed the same principle of an upward window-draught, in another and rather pretty way, very suitable for a dining or drawing-room. A pair of folding glass doors are fitted a few inches inside the ordinary sashes, a few plants being placed for ornament in the space between. The space is open at the top. The lower sash outside is raised some inches, and the cold air is deflected by the glass doors into an upward current, which flows over their tops into the room.

Sometimes perforated panes or louver panes are employed at the top of the window; and in cottages one often sees a whirling wheel fitted to a circular aperture. These devices more or less dilute or disperse the draught, but are not equal to the upward-current plan. If draught has to be stopped directly, a sheet of perforated zinc not too coarse in pattern is the most effectual plan.

Tobin Tubes.—One of the most generally popular forms of *inlet* is the "Tobin Tube," invented by the architect of that name. It consists in its simplest form of a square tube of wood standing perpendicularly in the room, ending five feet nine inches from the floor. The bottom end communicates with an inlet from the fresh air outside, either in the wall, or brought by a flue from a distance; and the top is open, though usually protected by a piece of perforated zinc from dust and rubbish falling in. A view of a room thus ventilated was given in Vol. I., p. 21, and Fig. 7 is an ideal section of a room to which air is admitted by a Tobin tube, while foul air finds a corresponding outlet—in this case a Sheringham valve. It will be perceived that the tube is of such a height as to deliver the fresh air above the heads of the inmates, and with an upward current, so as to cause diffusion and thereby avoid draught.

Draughts are, however, undeniably found in some cases associated with these tubes, and it may be well to mention their usual causes. It may occur from the tube being badly made, so that chinks appear at the corners where the boards are fastened together. The tube itself ought to be air-tight, allowing no cool air to escape except at the top. Some are too short; less than five feet nine inches should not be used, to deliver the supply well overhead. Lastly, it is bad practice and foolish to place the Tobin tube or inlet immediately *opposite* an outlet with a powerful

draught, such as a large chimney. So placed, there must be more or less draught across the intervening space. It is far better if one of the tubes can be on the same side as the fire. When such matters are attended to, there are numerous houses where Tobin tubes give every satisfaction.

It is by no means necessary that the inlet for a Tobin tube should be on the same side of the room as the tube itself. On the contrary, it is often very much better to carry a flue right across under the floor, whereby the air will become perceptibly warmed, and a better position to avoid draught may be secured. This can often be most simply done by laying a square wooden flue along between two of the floor-joists; but it must be a flue, put together air-tight, not using the mere space between two joists, as we have known done, but which brings the air over all the dust and *débris* beneath the floor. The flue should also be so arranged that it can be swept, if needful. Sometimes the tube itself can be brought up more conveniently from a lower room.

It is but rarely that a Tobin tube can be used direct from an entirely open inlet in the wall. In towns it is desirable to have some protection against smoke and "blacks," and always it is desirable to avoid such a direct draught of cold air as would follow an open inlet immediately at the bottom of the tube. One common expedient is shown in Fig. 8, where the actual inlet is built out somewhat from the wall, protected by a slanting metal cover from rain

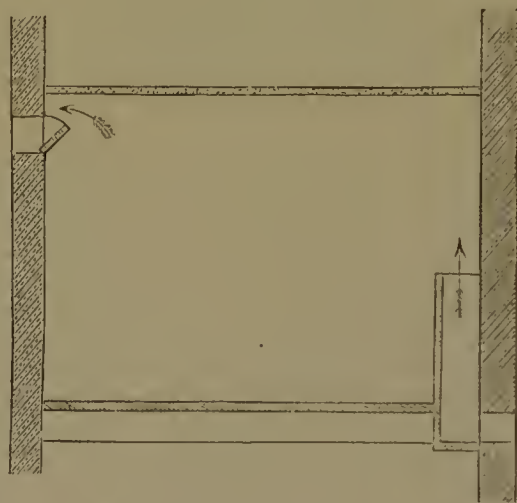


Fig. 7.—PRINCIPLE OF TOBIN TUBE.

above, and with the actual opening beneath: while between this and the opening in the wall itself is an easily accessible screen, formed of two pieces of metal network a couple of inches apart, the space being filled with very loose cotton-wool. It is, of course, necessary to see that the opening is not near a drain, or a grating, or a hollow which during rain becomes

a puddle; indeed, the ground beneath, if the opening is near the ground (which need not be the case with upper rooms), should be rather raised, and paved or concreted with a slope-away, that all may be as fresh and sweet as possible. The opening should not be less than two feet from the ground. If necessary, to secure this, the inlet may be above the floor-line of the room, the tube itself being shorter and more in the form of a bracket, but carried up to the same height at the top, of nearly six feet above the floor.

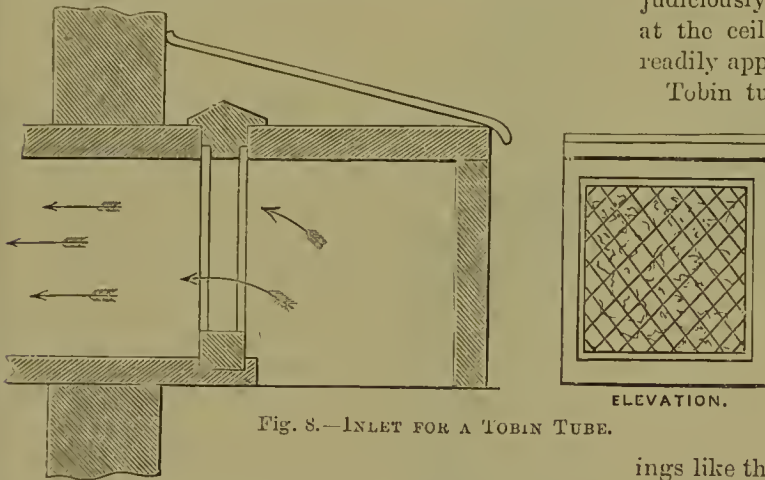


Fig. 8.—INLET FOR A TOBIN TUBE.

A simple form of what is virtually a shortened Tobin tube is known as the "Caws Inlet," and is shown in Fig. 9. This kind of ventilator is very simple and cheap, but is more adapted for large than small rooms, the draught being so short and direct.

Tobin tubes are generally protected by a filtering bag or screen in the tube itself, and sometimes by a water-chamber. Fig. 10 shows one as constructed by the Waterspray Ventilating Company. Here there is a trough of water arranged at the bottom of the tube, which can be used or not, at pleasure; while

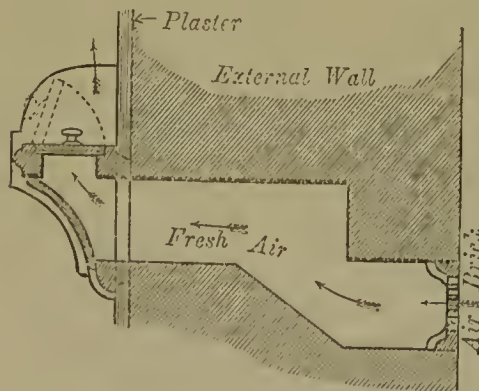


Fig. 9.—CAWS INLET.

from the top of the tube hangs a square pyramidal-shaped bag of porous material, shown by the dotted lines. The tube is also fitted with a regulating valve.

Of course it is not necessary that Tobin tubes should draw their supplies from the outer air direct. In houses specially planned, there is sometimes a large ventilating chamber in the basement, in which a fire is kept during winter, from which flues are arranged to supply all the tubes throughout the house. They may be brought from hall, or passages or staircase, through which there is thorough ventilation; and, in fact, allow of endless adaptation to different circumstances. In general, Tobin tubes judiciously arranged, with Arnott valves for outlets at the ceiling-level, will afford the best and most readily applicable system of ventilation.

Tobin tubes should be cleansed at due intervals from the dust and dirt which must gradually collect in them.

Mechanical Ventilation.—

There are many systems of ventilating rooms by mechanical means. Air may be forced into a room by means of pistons, or fans, or other mechanical blowers; or it may be drawn through a room by similar means. Large mansions, or build-

ings like the House of Commons, are often ventilated in this way; and in the latter case the air is *iced* when necessary. The "Waterspray" system consists in ejecting a spray of water either down or up a shaft. This washes the air from impurities, and at the same time acts as a pump of considerable power, the air being drawn along with the current of spray. Hence a spray may act either as an inlet pump, or as an exhaust at the outlet. Unless care be taken to get rid of all spray, however, this system must supply damp air. This can be avoided, and the spray current may also be warmed, when it becomes a very efficient means of ventilation; but the supply of water required, and other reasons, make it chiefly applicable to cases outside the scope of this work.

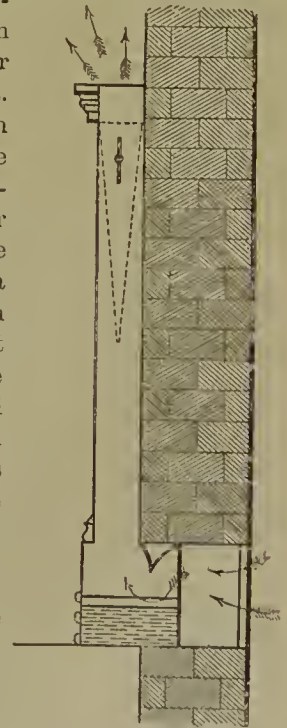


Fig. 10.—TOBIN TUBE WITH WATER-TROUGH AND FILTERING BAG.

Warming the Air.—

This is undoubtedly desirable, and is well carried out in systems already alluded to, where a chamber,

which can be warmed, supplies the entire dwelling with fresh warm air. But in a preceding chapter upon "Warming the House," it has been shown that many grates or stoves are now constructed to convey air warmed by the fire into the room; and if this supply be sufficient, and there be sufficient outlet, there is good ventilation. Grates on the principle of Griffin's (p. 32), or Captain Galton's, are good in this respect. But almost any grate may have a thin flat iron flue carried somewhere round the back, where it will be warmed by the heat of the fire or the ascending current. Then, if this flue be supplied by a good channel from the outer air, and delivers at the other end to an open grating under the mantelpiece, a large quantity of warmed air will be drawn into the room.

If the expense of gas be not an objection, a special "Air-Inlet Warmer" is made by the Waterspray Ventilating Company, and can be applied to any particular case with the greatest ease. The gas furnace and its flues, as shown in Fig. 11, are entirely *outside* the building. The air passing in is carried beside the heated flues and is thereby warmed as it enters, the consumption of gas for an adequate furnace being about 15 feet per hour, and the cost of the whole apparatus about £4, for a clear opening or inlet of about 16 × 18 inches, equal to an inlet of about 15,000 cubic feet per hour.

The same principle can manifestly be applied to any house where there are hot-air or hot-water flues handy, whether in house or greenhouse. If a few pipes can be arranged to traverse a chamber through which the air passes, it will be warmed. A flue for a Tobin tube passing under a floor, also acquires the temperature of the house, and warms the air considerably.

Warming the Room.—In many cases the objections to free ventilation would all disappear if *the room itself* were properly warmed. This applies specially to bedrooms, and the opening of windows therein where other means of ventilation do not exist. In winter, the air outside becomes intensely

cold at night, and it is no wonder if freer admission of it is resented. We know very well that the necessities of many households require the most rigid economy, and forbid what is generally thought the luxury of a bedroom fire; but in thousands of cases such would be found the truest economy. Especially where there is any tendency to bronchitis or catarrh, the passage from a comfortable sitting-room to a cold bedroom at night, is every night attended with appreciable danger; and many a valuable life has been thus cut short which might have produced many years more of useful work, had only the simple precaution of a fire in the bedroom been employed. You may keep the body warm; but this does not prevent the danger, to susceptible persons, of cold air for the lungs. The fire also aids ventilation; and many who can well afford it would get through winter in quite a different manner if they took our advice. A bedroom fire would be the cheapest doctor many people could have. Of course we are not urging it upon any who really do not require it.

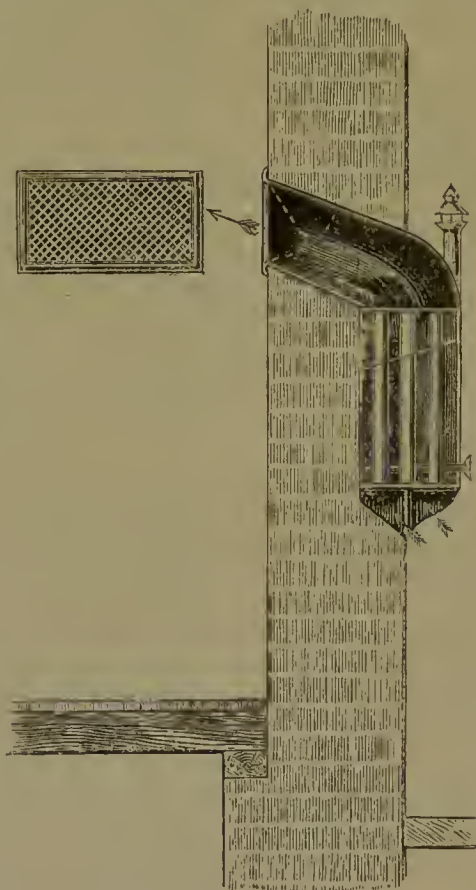


Fig. 11.—AIR-INLET WARMER.

Deficient Ventilation.—

People whose rooms are obviously ill-ventilated, ought undoubtedly to get the matter seen to, as well and as soon as they can. Meantime they must do what they can to minimise the evil; and much can be done if the matter be constantly borne in mind. Sitting-rooms should be left to air whenever

possible, with the door wide open, and, if possible, an opposite window too. The more and oftener *any* window can be opened, the better. Take care never to allow a chimney to be stopped up. Often a bedroom door may be left an inch or two ajar. As much as possible, a free current of air should be kept up, by opening windows at proper places, through the whole staircase and hall, especially if there is gas-light anywhere. But as soon as possible do *something*, considering carefully the best arrangement practicable. Unless the windows reach the *top* of the room, an Arnott valve into the chimney will generally be the simplest, cheapest, and most practicable exit: while inlet may probably be provided at the window on Dr. Parkes'

system, or by boring a row of holes through the top of the door. If the draught from the latter be too strong, it may be checked and distributed by perforated zinc, or by fixing a slip of wood slanting upwards away from the door, in front of the holes, to throw the current upwards. Doors, at least, can always be left open for some hours every day; and this should always be done as regards bedrooms, to admit fresh air from the staircase and passages.

Bedclothes should be left exposed for at least two hours before the bed is made, and the same precaution should apply to all the night-dresses, which require it just as badly. The sort of tidiness that folds up a night-dress right off, and has the bed made directly, is from a sanitary point of view a great evil. By doing what we can in these simple things, we may minimise the effects of insufficient ventilation.

LETTUCE AND SALADS.

THERE is one green vegetable to which we have not referred in the previous culinary chapter, and that is lettuce. We have all heard of the famous French salads, and some thirty or forty years ago a French salad was almost unobtainable out of France itself. In the present day, however—probably thanks to the constant stream of travellers going backwards and forwards—it is really just as easy to get a good first-class French salad in London as it is in Paris; indeed, we are not sure it is not easier. Some of the very best salads we have ever had were obtainable in the south of Cornwall; the little French lettuces, so called, coming from the Scilly Isles, and certainly, to our mind, they were superior to any lettuce ever to be had in France. But we must begin at the beginning. First of all, there is the good old-fashioned English salad, and no doubt there are hundreds and thousands of people who in the present day prefer this old-fashioned salad to the more modern one, made from the little round and soft French lettuce.

The Old English Salad.—The old English salad was made from those large stiff cabbage lettuces which, when eaten, caused a musical sound to proceed from the mouth. Some persons prefer these lettuces, while some prefer the others; and the best mode of dressing a salad is almost equal to the old disputes about the best method of brewing a bowl of punch. The old English salad was made by first of all washing a large cabbage lettuce in plenty of cold water, drying it, then cutting it up into small pieces, and placing it in a large salad-bowl with a variety of other things, the chief of which are cut-up celery, mustard and cress, sliced boiled beetroot, and sometimes sliced cucumber. This was also occasionally ornamented with hard-boiled eggs, but more often not. The mode of dressing this salad was as follows:—When cream was obtainable, cream took the part now occupied by oil in dressing a French salad, and formed the basis of the dressing. To three or four table-spoonfuls of cream was generally

added a spoonful of brown sugar, two or three spoonfuls of made mustard, some pepper, salt, and vinegar. Now and then, when English thoughts and tastes were in the transition state, the butler, or more often young lady of the establishment, would be seen to add oil, but in a way as if it were some very dangerous poison, and that one or two drops too much would be fatal. Whether these few drops of oil had any effect upon the salad or not, we cannot say; but judging from the very early recollections of childhood, probably they had. For we then bought oil in a small bottle, probably the size of what now can be obtained for sixpence. This was poured into one of the cructs, and no doubt, when originally bought, was a most admirable olive oil, tasteless and of a bright yellow colour. Owing, however, to the fear and horror with which every member of the household regarded this dangerous bottle, probably this quarter of a pint of oil would last some three or four years, during which period it had degenerated into a green compound, more resembling the old-fashioned cod-liver oil when it first came out, only probably the smell would be something worse. This dreadful mess was added—fortunately, only a few drops at a time—to the salad. Probably in the present day young ladies especially may think we have drawn upon imagination; but we can assure them solemnly that what we state was an absolute fact, and one which shows how much the human intellect has advanced in this country on the subject of cooking during the past half-century.

A French Salad.—We will now describe how to make and dress the ordinary French salad, such as you will get at the “Café Royal,” in London, or the “Café Bignon,” in Paris. Take one, two, or three of the little, round, soft French lettuces. Remove all the darker part of the green leaves that have become heavy or sodden in appearance, either from being kept too long after being cut, or that may have become slightly “gone” from moisture. In fact, only keep that part of the leaves which

may be said to be crisp as well as soft, if you can reconcile these two apparently contrary ideas; but you will understand what is meant the first time you take a French lettuce in your hands.

Some persons say that a lettuce to be eaten to perfection should not be washed at all. Under some circumstances this is practicable, but as in England ninety-nine times out of a hundred we have to take the lettuces that have been sent from abroad, or, at any rate, from distant parts of the country like Cornwall, or the Scilly Islands, or Jersey, or Guernsey, the lettuces, which have been packed in large quantities in baskets, will require not only thoroughly washing but trimming. First of all, the stalk at the bottom will be found to be slightly discoloured. This has to be cut off, and then trim away all the bad parts of the leaves round the edge before you pull the lettuce to pieces. Sometimes you will find it two-thirds good and one-third bad; and by taking it by the stalk in the left hand, with a sharp knife you can easily trim away all the bad parts till only the good is left. Then pull the lettuce to pieces, and throw it into cold water. When you have got sufficient lettuce-leaves—and, remember, lettuces vary enormously in size, some being not much bigger than an egg, and some resembling a real cabbage, not only in appearance but size—throw them into an ordinary frying-basket or whitebait-basket, and shake them thoroughly. By whisking the basket through the air, round and round, you can get rid of nearly all the water. This requires care and a little experience, but by moving the hand round skilfully none of the lettuce will fall out of the basket. Another good way of drying a lettuce is to put all the leaves into a clean dry napkin, bring the four corners of the napkin together, and then shake the contents violently up and down in the air. So long as the napkin continues to get moist, the leaves are not dry. If you persevere with one or two clean cloths, till as you shake the leaves the cloth does not become damp at all, you will find that the lettuce is perfectly dry; and one of the secrets of a good salad is to have the leaves dry at starting. Remember that simply shaking off pure clean water into a cloth does not make a cloth dirty, and, therefore, if you go to the kitchen drawer containing clean cloths, you can make sure of having a lettuce perfectly dry; and by hanging the cloths after they are used over the back of a chair, in front of the fire, you can in a short time fold them up and put them back again.

Now place all the leaves in a salad-bowl. When you have been abroad, you will find that the salad is brought to table with a few little green specks sprinkled over the leaves, which many Englishmen

have in vain endeavoured to find out about. Sometimes the waiter won't tell. At other times he absolutely does not know; but more often when he does know, and informs the English visitor, however proficient the latter may be as a French scholar, he is informed of some word the translation of which he is not acquainted with; and on turning to several French dictionaries he will find no such word appears. The word is *estragon*. This unhappy word often leaves the inquiring lady exactly where she was before she asked the question; but we will divulge the secret, and many a modern French dictionary will now do the same—it is simply tarragon. To make a proper French salad we require two or three leaves of tarragon. These are long thin leaves, and are possessed of a very strongly marked flavour. Dry tarragon is sold in bottles, and is very often used for various kinds of fish-sauces; but dry tarragon will not have the proper effect upon a French salad. It requires a *fresh-cut* tarragon-leaf; and those who are really fond of a good salad would do well to see that their gardener obtains a few roots of tarragon, and plants them in some suitable spot in the garden. Two or three leaves are amply sufficient for a salad; and the best plan is to take them and cut them up very fine indeed with a pair of scissors. The smaller the specks of tarragon, the better it is for the salad, for a large piece of tarragon in the mouth at once is absolutely unpleasant.

We will now suppose that the two or three leaves of tarragon have been cut up very fine, and sprinkled over the lettuce, and that, say, a couple of hard-boiled eggs, which have been allowed to get quite cold before they are cut up, are placed round the edge of the salad. Here observe that in cutting up hard-boiled eggs for a salad, it is always advisable not to cut the eggs open until the very last minute. If you take a hard-boiled egg, and remove it from the shell, and leave it in cold water, it will keep good for days; but if you cut it open—say, into four quarters longwise—after an hour or two, or even less in hot weather, it begins to get shrivelled and look stale. Also bear in mind that in cutting up a hard-boiled egg you must not be frightened if the part where the yolk joins the white is a trifle green, and also if you have a slight smell on first cutting open the egg. A *perfectly fresh* egg, when boiled hard and allowed to get cold, will have this smell, which is owing to the egg containing a gas known in chemistry as sulphuretted hydrogen. Many a good egg has been thrown away from good motives, owing to the ignorance of the person who, with a delicate sense of smell, detected this slightly unpleasant odour, and hastily jumped to a wrong conclusion in consequence.

Salad Dressing.—We now come to the all-important point of dressing the salad. The secret of dressing a salad is to have perfectly pure oil, and in the present day pure oil is not so easily obtained as many people imagine. In fact, there has been a newspaper discussion on the point, and we can only say that the best method to obtain really good oil is to buy it where the bottle bears the label of some well-known firm, whose position and integrity place them above suspicion. If you use oil made from anything else than the genuine olives, of course you cannot expect to get the salad right; and in a day when adulteration is so universal, or almost universal, it is of very great importance that you take extra precautions, as the oil made from cotton-seed, although admirable for the purpose of frying, will not do for the purpose of eating, especially where, as we shall now show, you have to take the oil in considerable quantities. Let us now suppose we are going to dress salad enough for four people. First of all take a saltspoonful of salt, and another saltspoonful or rather less of pepper, and place them in a table-spoon, and take the table-spoon in the left hand and fill it up with oil. With a fork stir up the pepper, salt, and oil, and then turn it over on to the lettuce. Now fill up the spoon three more times; that is, allow a table-spoonful of oil to each person. We can imagine some one saying, "Oh, how horrible!" Still if you will really try and get perfectly pure oil, which is as tasteless and pure as the very best butter, you will find that, so far from the salad being disagreeable, it will be delicious. Now mix the salad well together, tossing it about so that every part of the leaf of the lettuce is thoroughly saturated or covered with the oil. Remember that there is no occasion to cut up the lettuce; on the very contrary, whatever you do, don't cut up the lettuce at all. Simply pull the leaves off the stalk, and mix the salad as it is. It is a very great mistake indeed to cut up French lettuce with a knife and fork; in the case of a large cabbage lettuce, of course it is different. Now having mixed these leaves well together, so that each leaf is covered over with oil, fill the table-spoon about half full with vinegar. Sprinkle this over the leaves, and toss them together again. You will probably find that half a table-spoonful of vinegar will be amply sufficient for three or four table-spoonfuls of oil. However, it is a matter of taste, and the writer himself would just as soon have no vinegar at all. On the other hand, there are people who like to have their plates swimming with vinegar; and we have seen them, horrible to relate! lap up the vinegar afterwards with the blade of the knife. There is no accounting for tastes.

The salad is now finished, and those little specks of tarragon will be the means of giving it that pecu-

liar flavour which those of you who have been fortunate enough to travel abroad, and have eaten a good dinner in a French restaurant, will probably only recollect having tasted before under such circumstances.

There is one more flavour, however, which we can add to the salad, and that is garlic. This, of course, is really and purely a matter of taste. Some persons who may be called epicures, and even gourmands (for there is a great deal of difference between *gourmand* and *gourmet*), would not care to have a salad without garlic; other persons could not eat a salad containing it; while there is a third class that can scarcely remain in a room in which a salad has been placed dressed with garlic. If you do not want garlic, it requires no directions how not to use it; but if you do, the best way is to get a piece of stale crust of bread—the staler the better. Now take a bead of garlic, cut off the point, and rub the piece of bread over with the garlic. Then place the crust of bread in the salad, and simply toss the salad together with a spoon and fork for about a minute, and the flavour of garlic will be amply sufficient. Very many persons object to the flavour of garlic because they do not know what the flavour really is, owing to the fact that they do not know how to use it. If you were to take the garlic and chop it up, and put it in the salad, there is no doubt that the result would be extremely disagreeable; and only Italians and Spaniards would be able to eat the dish without after-suffering in consequence. But when garlic is used merely to *flavour* any substance—by rubbing a piece of bread, or rubbing the dish, or rubbing the chopping-board—it is quite possible to obtain a really delicate flavour, without any of those disastrous after-effects which sometimes happen even in the case of eating onions. Garlic, after all, is like a very strong and rich onion. Speaking personally, we would much rather even eat garlic than an onion, the latter being in our individual case followed very often by disagreeable consequences which never follow after taking garlic. On the other hand, there may be many persons who would feel exactly the other way. Perhaps a great deal depends upon habit.

Salads Mayonnaise.—We next come to that important branch of salads known as salads mayonnaise. We have already described how to make mayonnaise sauce, and how to ornament it by putting little green and red specks over the top of the white sauce, and placing round the edge hard-boiled eggs cut in halves or quarters, small red crayfish if they can be obtained, or slices of beetroot, or the red claws of a crab or lobster, as the case may be. In the case of the mayonnaise-

salad, it depends, of course, a great deal upon what is mixed with the salad as to how it should be arranged. For instance, if you have a lobster-salad made from French lettuce, it will be sometimes best to put the bulk of the salad at the bottom, the cut-up lobster on the top of that, and a soft thin flappy leaf of the lettuce over the top, to make a smooth surface on which to spread the mayonnaise sauce. Or, if the mayonnaise salad is made from smoked salmon—and this is one of the most delicious we can have—the thin slices of salmon are best placed over the leaves, as they form an admirable smooth surface. Again, in ornamenting mayonnaise salad, it is sometimes nice to take the heart of the lettuce, which is shaped like a small French artichoke. If you dip this in the mayonnaise sauce while it is very thick, so as to cover it completely, and then take a short wooden skewer and stick in the bottom, when you pile up the salad before masking it, this can be placed on the top. Now cover up to the bottom of the heart of the lettuce, or the root of it, the surface that has to be masked. Consequently when the salad is finished, you have a sort of centre ornament. This centre ornament can finally be covered with these little green and red specks, like the rest of the white surface; and, of course, the appearance is very much enhanced. By having the upright skewer in the centre of a considerable size, there is no fear of persons taking it on to their plates by mistake: and when the salad is handed round, as people always cut downwards, the wooden skewer will escape notice until the appearance of the dish has been entirely destroyed by being cut into.

When there is chicken mayonnaise, some of the white meat of the chicken had better be placed on the top, and in this case it is always best to add a few sliced pickled gherkins round the base of the dish, as this not only enhances the appearance, but adds considerably to the flavour when eaten, the pickle being a decided improvement.

Recollect also that various kinds of cold fish make excellent mayonnaise salads. We may here espe-

cially mention cold boiled salmon and cold turbot. In ornamenting fish salads, you can also add filleted anchovies. This will be found a great improvement indeed to all kinds of mayonnaise.

German Salad.—We next come to another form of salad, known as German salad and Dutch salad. German salad is composed of every variety of cold vegetable known, the basis of which is generally potato; only the potato must not overwhelm all the other vegetables in quantity, otherwise it degenerates into a potato salad. The best German salad is made by putting together the remains of cold carrot, cold turnip, green peas, cauliflower, potato, &c. The cold vegetables should be, as much as possible, free from moisture, and they should be dressed in the ordinary way like French salad, garlic being added or not, according to taste.

A Dutch salad is also very nice, but depends upon the addition of some kind of raw herring or fish, such as kippers. In this country there is a very proper prejudice against eating raw fish, which is by no means wholesome. But this very excellent Dutch salad can be made by adding the remains of fish that has been cooked; and we cannot imagine anything better than cold kippered herring. Try the following experiment:—If you have kippered herrings for breakfast, tell the cook to keep back two of them till they are cold. Now take some ordinary lettuce, and proceed exactly as if you were going to make an ordinary French salad. Then take all the meat off the kippered herring bones, and with a couple of forks shred the meat into little pieces. Mix this with the lettuce, add hard-boiled eggs if you like, dress it with oil in the ordinary way, and you will find it a most appetising salad, which, if eaten at the commencement of dinner, is provocative of appetite rather than otherwise; while if eaten at the finish, it will enable you to enjoy a good bottle of claret afterwards more than you otherwise would do.

MINOR SURGICAL DISEASES.

Abscesses.—An abscess is a collection of matter occurring in any of the tissues or organs of the body. There are various kinds of abscesses; thus we speak of “acute” and “chronic” abscesses, “hot” and “cold” abscesses, “diffuse” abscesses, and so on.

An acute abscess is the most typical form, and is usually the most painful. Considerable pain is experienced, there is some throbbing and beating, and the skin becomes shining, glazed, and tender. Matter

is gradually formed in the interior of the abscess, and little by little makes its way to the surface, so that it may escape. This is attended with a good deal of fever and constitutional disturbance, the temperature being elevated, the pulse quickened, and the appetite impaired.

The chronic abscess is of longer duration, but causes less pain and less inconvenience. These abscesses do not readily “point,” but often extend

laterally, burrowing for a considerable distance under the skin. Sometimes they last a couple of years or more. A cold abscess is very much the same as a chronic abscess, except that when opened the contents are found to consist of thin watery fluid instead of ordinary matter.

Abscesses are met with in all regions of the body, and may occur at any period of life. Their size varies from a pin's point to a tumour containing a pint of matter or more. An abscess may press on the nerves of a part and give rise to a great deal of pain, or it may open into or involve some internal organ.

The treatment varies according to the size and position of the abscess. When small and near the surface, the best internal remedy is sulphide of calcium, given in the form of tabloids containing a tenth of a grain, one being administered every three or four hours. The best local application is a mixture of equal parts of glycerine and extract of belladonna. Linseed-meal poultices are also useful, and they should be applied frequently, and as hot as they can be borne. The general health and strength should be sustained by the administration of bark or quinine, with a fair allowance of burgundy or port wine. In most cases the abscess will have to be opened by a surgeon, and this is usually done "antiseptically," carbolic acid or some similar substance being employed to keep the wound sweet and clean, and to prevent the admission of germs. An abscess after being opened does not heal at once, but continues to discharge for some time, causing a great drain on the system. It will probably be necessary to feed-up the patient, and to give abundance of tonics, cod-liver oil, Kepler Extract of Malt, beef-and-iron wine, and other similar remedies. Milk abscesses are met with in mothers who have been compelled to wean their children suddenly, or who suffer from "sore nipples," incapacitating them from nursing. The breast becomes distended with milk, which sets up inflammation and leads to the formation of matter. The sore nipple may be cured by applying a solution of nitrate of silver (two grains to the ounce) with a camel's-hair brush three or four times a day. The breast may be emptied with a common breast-pump, such as may be obtained from any chemist, or by gentle manipulation with the fingers. The secretion of milk may be arrested by using freely a mixture of equal parts of glycerine and extract of belladonna; it forms a kind of ointment of about the consistence of treacle, which may be applied on lint over the whole breast, care being taken not to allow the child to suck. When the breast is very hard and knotty, rubbing with warm olive-oil may do good. The breast should be well supported by means of a bandage, or a handkerchief

folded so as to form a triangle. The bowels should be kept well open, and the food should be ample and nourishing. Should these steps fail to afford the desired relief, or should there be much throbbing, it will be necessary to consult a surgeon, for not improbably it will be desirable to make a little cut and let out the matter. Poulticing is sometimes useful; and if the abscess is near the surface, benefit may be experienced from taking a tabloid of a tenth of a grain of sulphide of calcium every three or four hours for a couple of days or more.

A Stye in the Eye.—A stye is, in reality, a little abscess which forms at the margin of the eyelid from inflammation of one of the glands or follicles. It is met with chiefly in delicate children, but occurs sometimes in adults when there is a generally depressed condition of health. The best plan is to bathe the eye frequently with hot water, and to apply from time to time a bread-and-water poultice. The bowels should be kept open by some gentle aperient or laxative. After a time the abscess comes to a head and bursts, and there is an end of it. A succession of styes may be taken as an indication that a thorough course of tonic treatment is needed; and such remedies as cod-liver oil, iron and quinine, &c., should be given freely. A stye is never dangerous, but is painful while it lasts.

Boils are not pleasant visitors. They appear in various situations, often on the back of the neck, or on the forehead, or on the arms and legs. Some people are especially prone to them, and suffer from them in successive crops. They are usually attributed to "a disordered condition of the blood," a term which is simply a cloak for our ignorance, and has the advantage of being utterly meaningless. The pain of a boil, especially when in an inconvenient situation, is very great; and it is usually attended with some fever, and considerable constitutional disturbance. The patient loses his appetite, is depressed and miserable, and is quite unfit for work. If a cure is to be effected, the sooner treatment is commenced the better. It is a good plan to begin with the administration of a brisk purgative—a blue pill or compound colocynth pill at bed-time, followed by a scidlitz powder in the morning. The best remedy to take is sulphide of calcium, in small doses frequently repeated. The "tabloid triturates" contain a tenth of a grain, and one should be taken every three hours for a couple of days, or perhaps even longer. The best local application is a mixture of equal parts of extract of belladonna and glycerine. This should be well smeared over the part, and a linseed-meal poultice should then be applied as hot as can be borne, the

whole being covered with a piece of oil-silk to prevent evaporation. If this treatment is carried out systematically, the boil will either abort or dry up, or it will burst and discharge freely. When the boil has burst, the sulphide of calcium should still be given, to promote the discharge of matter, but the belladonna will no longer be required, as the poultices alone will suffice. In some cases a table-spoonful of yeast three times a day answers even better than the sulphide of calcium. During the progress of development of the boil it is best to abstain entirely from meat, and to be satisfied with milk and soda-water, beef-tea, soup, and gruel, or arrowroot. When once the boil has matured, it will be necessary to adopt other tactics, and feed-up the patient. Food should be given in abundance, and should be of the most nutritious description. Good port wine will be found a great help, and a teaspoonful of ammoniated tincture of quinine in a wineglassful of water, immediately before meals, is a useful accessory. As soon as the patient can get about and take outdoor exercise, iron should be given—a teaspoonful of Wyeth's Dialysed Iron in a wineglassful of water, after meals, or a table-spoonful of Burrough's Beef and Iron Wine, twice a day. Coca wine is another good remedy, and acts as a powerful nerve tonic.

The "abortive" treatment of boils by the hypodermic injection of carbolic acid into the boil at an early stage has been much practised of late, and is believed often to avert the succession or crop of them which so frequently happens, and which it is thought may be due to the infective power of the boil itself. But this is a mode of treatment which must be left entirely to the medical man, as the injection of carbolic acid by an unqualified person is most dangerous, and might even cause fatal results.

A patient who is often subject to boils should try and discover the cause. Most likely his house is not in a satisfactory sanitary condition, and there is probably something wrong with the drains. The whole matter must be thoroughly investigated, and the services of one of the Sanitary Protection Associations should be called into requisition. Plenty of outdoor exercise is useful as a preventive, and the patient must remember to take a gentle purgative from time to time, although excessive purgation is to be avoided. Stimulants should be taken in the strictest moderation, and a light claret at meal-times is better than beer. A teaspoonful of confection of sulphur two or three times a week is beneficial; and all garments which rub or irritate the skin should be avoided. The under-clothing should be light and warm, and a cold bath should be taken before breakfast. Change of air is beneficial, and the patient should endeavour, if possible, to get away every

week from Saturday till Monday. It is only by the greatest care and attention to the general health that the recurrence of boils can be avoided. When boils attack several people in the house, it may be taken as pretty well proof positive that there is something the matter with the sanitary arrangements. Either the water is contaminated, the closets are untrapped, the soil-pipe is sealed and rotten, or there is a cesspool under the house, or some similar mischief. The best thing is to move out temporarily, and have the whole matter investigated by some independent sanitary authority. When the defects are detected, the landlord should be required to put them right.

Whitlow.—A whitlow is a painful affection, but it is, as a rule, unattended with danger. The simplest form is that which occurs about the root of the nail, and is dependent on some slight injury, or the inoculation of the part with some irritating or poisonous substance. The pain is considerable, and is often of a throbbing character. The finger feels hot, the skin is red and, perhaps, distended. Even the smallest quantity of matter beneath the nail will give rise to considerable suffering. The best plan of treating a whitlow is to poultice with linseed meal, and to hold it from time to time in water as hot as it can be borne. Cutting a little wedge-shaped piece out of the nail with a pair of nail-scissors will often allow of the escape of the pent-up matter, and afford prompt relief. If the inflammation seems inclined to extend along the finger, the advice of a surgeon should be obtained, as there is no saying where it may end. If neglected, or not dealt with promptly, a whitlow may result in a stiff joint, which is not only inconvenient, but is extremely unsightly.

Bunions and Corns.—A bunion is due, in the great majority of cases, to the custom of wearing tight and pointed shoes or boots. The great-toe is pushed over in an oblique direction, and the angle thus formed becoming irritated, a bursa is formed, which in course of time becomes inflamed and irritated. The best mode of treatment is to amend the shape of the boot. Inflammation may be allayed by warm foot-baths, poulticing, and rubbing in lanoline. Corns are less serious, and consist simply of thickened skin accumulated as the result of undue pressure at some particular spot. They are usually hard, dry, and sealy; but when situated between the toes, and kept constantly moist by the secretions, they may be soft and spongy. They are always very painful, and may interfere materially with the powers of locomotion. The best remedy is to apply Martindale's "Solvine" by means of a glass rod, for several nights in succession, and then remove the thickened

skin with an ordinary pair of nail-scissors. The application of strong caustics is to be avoided.

Warts are due to the over-growth of the papillæ of the skin, and usually occur on the fingers, often in large numbers. They may depend on local irritation, or may be the result of some constitutional condition. There is a common belief that the blood from a wart is capable of producing other warts on people with whose skin it may happen to come in contact, but of this there is no proof. There are many ways of getting rid of them. A good application is the strong, or "glacial," acetic acid, which is very efficacious. Small warts, when they occur in numbers, may be got rid of, certainly and painlessly, by keeping them constantly moist with a lotion made by adding two drachms of dilute nitric acid to a pint of water. Nitrate of silver, or lunar caustic, is often used, but its action is too superficial to be of much service. An excellent remedy for warts is the tincture of *Thuja Occidentalis*, which may be taken internally in doses of three drops every three hours, and also applied locally to the wart itself.

Chilblains and Chapped Hands.—A chilblain is a low form of inflammation of the hands or feet, resulting from deficient circulation. Men rarely suffer from them, but they are common amongst women and children, and are the bane of school-girls. They are painful, but they are useful, calling attention to the fact that the health of the patient is not what it should be. People who suffer from chilblains require good food, and should take plenty of outdoor exercise. A growing girl, for example, should have meat three times a day; and there should be something hot, such as porridge, or hominy, or ham and eggs, or eggs and bacon, with tea or coffee, for breakfast. Breakfast should be ready for children as soon as they come down, and they should not be required to practise in a cold room—or in any room, for the matter of that—before they have had a good hot meal. Children are often left too long without food; and, the circulation being weak, chilblains result. During the greater part of the winter the girls will have to take cod-liver oil, or the Kepler Extract of Malt, with from time to time Parrish's Chemical Food, or Fellowes' Syrup of the Hypophosphites. The best form in which to take exercise is on horseback or on a tricycle. It should be taken systematically, and every day, wet or fine. It is a mistake to reserve cycling for boys, for girls need exercise just as much as they do, and cannot possibly come to any harm on a properly constructed machine. Boys should be encouraged to play hockey and football, and, in fact, any game which expands their lungs and develops the limbs. No boy should

ever be allowed to attend school in a large town, but should be sent right away in the country, where he can get plenty of good fresh air. A boy must have companions, for he cannot be expected to play by himself. Hot unventilated rooms are bad both for boys and girls. Care should be taken not to warm the hands in front of a fire soon after coming in from a walk.

There are several applications which are useful in the treatment of chilblains. One of the best, when they are unbroken, is iodine ointment. It should be rubbed in gently night and morning, and an old glove should be worn during the day. Another good application is the menthol ointment, or, better still, a cone of menthol and capsicum. The capsicum causes some tingling and smarting at first, but it improves the circulation locally, and does a great deal of good. When the chilblains are broken, the best way is to poultice with linseed-meal, and then rub in some calendula ointment made from the common marigold, or a little glycerine of starch.

For *Chapped Hands* a capital preparation is one part of glycerine mixed with two of Eau de Cologne, or with one of Eau de Cologne and one of Florida Water. Glycerine soap, vaseline and cold cream, and zinc ointment are also useful. Care should be taken to thoroughly dry the hands after washing.

Toothache.—There is no occasion to describe the symptoms of toothache, for there are few people who have not suffered from it at one time or another. Speaking generally, it may be said that decay of the tooth is the commonest cause of the affection, and that it may be "brought on" by sudden changes of temperature, by taking very hot or very cold substances into the mouth, and by eating sweets.

The real treatment for toothache is to have the offender stopped, or, should it be too far gone for that, extracted; but this may be impossible at a moment's notice, and palliative remedies will be found useful. As a rule, local applications do more good than internal remedies—at all events, in promptly relieving the pain.

An excellent mode of treatment is to clean out the cavity with a piece of absorbent cotton-wool rolled round the end of a probe or stout pin, and then carefully insert a little plug of the wool saturated with camphorated chloroform. The pain may be intensified at first, but it is soon relieved.

Another good preparation to be used in a similar way is a mixture of equal parts of creasote and chloroform.

A few drops of one of the volatile oils, such as oil of peppermint or oil of eucalyptus, inserted into the tooth, will often ease the pain.

Eau de Cologne held in the mouth for some

minutes will lull the pain, and brandy has the same effect.

It is a good plan to hold very hot water in the mouth for some minutes at a time, renewing it as often as is necessary.

It may be useful to mention some of the most efficacious of the remedies intended for internal use, with the doses and mode of administration.

Tincture of aconite is indicated when the toothache arises from cold. A tabloid triturate containing one drop may be taken every ten minutes for an hour, or ten drops of the tincture may be dropped in half a tumblerful of cold water, the dose of this mixture being a teaspoonful every ten minutes.

Tincture of belladonna answers best when the pain is shooting and throbbing, and affects several teeth at the same time. One tabloid triturate containing a drop may be taken every ten minutes for the first hour, and then hourly for four hours; or ten drops of the tincture may be poured into half a tumblerful of cold water, a teaspoonful being taken instead of tabloid.

Grey powder does good sometimes, when the tooth is very much decayed. One of the third-of-a-grain tabloid triturates may be taken every ten minutes for the first hour, and then hourly for six hours.

The trinitrine tabloids are wonderfully efficacious, and one should be taken every hour until the pain is relieved.

Sometimes a full dose of quinine, say five grains, will act more promptly than anything; and it is especially indicated when, in addition to toothache, there is neuralgic pain coming on at regular intervals.

It must be remembered that all these remedies are simply palliative, and the most that can be said of the best of them is that they afford temporary relief. The best remedy for toothache is to consult a good dentist. Nowadays it is rarely necessary to resort to extraction, and even very large cavities can be stopped with marvellously little pain. Even should extraction be necessary, the tooth can be taken out painlessly under gas, which, if administered by a really good anaesthetist, is perfectly safe. The art of dentistry has made great progress of late years, and it is inexcusable to suffer from toothache for more than a few hours at the outside.

Worms.—There are several kinds of worms which infest the human body, the chief varieties being the round worm, the thread-worm, and the tape-worm.

The common round worm varies in length from ten to fourteen inches. It is cylindrical, tapering at each end, and looks very much like a common or garden worm, except that it is white in colour. The female secretes eggs at the rate of 160,000 a day, so that it

is rapidly propagated. It is found in very few animals with the exception of man. It lives chiefly in the small intestine, but it is apt to wander, and not infrequently finds its way into the stomach, nose, and mouth. In some cases the human body has been found infested with hundreds and even thousands of these creatures, although as a rule the number does not exceed half a dozen.

Innumerable symptoms have been referred to the presence of these parasites, but there is no doubt that in the great majority of instances they give no indication whatever of their existence. In children, however, they may be the cause of irritation of the stomach, and derangement of the bowels.

The remedy relied on for their expulsion is san-tonin; three grains being given in a powder every alternate morning for a week. This rarely fails to effect a cure.

The thread-worm, or seat-worm, is a habitat of the lower bowel, and chiefly affects children. These creatures are very small indeed, rarely exceeding half an inch in length. They are often present in enormous numbers, the stools, when passed, being literally alive with them. Sometimes they crawl out and give rise to a great deal of irritation. They are supposed to produce itching at the nose, but there is no proof that this is the case.

They can easily be got rid of by injecting into the bowel, with a syringe, an infusion of green tea, or a mixture of salt and water, or, better still, a lotion containing half an ounce of tincture of perchloride of iron to the pint of water. An infusion of quassia is sometimes used for the same purpose. The general health of the child must be improved by the administration of tonics, such as syrup of iodide of iron, or quinine wine, or by giving Kepler Extract of Malt, or cod-liver oil.

The tape-worm is more difficult to expel, and a patient suffering from it should consult a doctor. It is generally introduced by eating underdone pork, or pork which has not been cooked at all. It is made up of a number of joints, and when fully developed may attain a length of several feet. There is no difficulty in recognising it, as the pieces which are passed look very much like pieces of tape. As a rule they occur singly, but there may be two, or more. They often give rise to a good deal of inconvenience, the patient degenerating in health. The joints are rapidly reproduced unless the head of the animal is expelled.

The remedy on which the greatest reliance is placed for the expulsion of this unwelcome visitor, is the extract of male fern. It must be given on an empty stomach, and the patient should take no food of any kind for at least six hours previously to the administration of the dose. The quantity of the

extract of male fern needed for the expulsion of the worm varies with the constitution of the patient, but usually from half a teaspoonful to a teaspoonful suffices. It is very nasty to take, and frequently gives rise to nausea and vomiting. A dose of castor oil is needed for the expulsion of the worm when

killed. The head is quite small, a microscopical examination being needed to detect it with certainty. Should the whole worm not be removed at the first attempt the treatment will have to be repeated.

In order to avoid tape-worm it is necessary to abstain from the use of underdone or smoke-dried meat.

HOME DRESSMAKING.

Much difference of opinion exists as to whether or not it is worth while for ordinary people to do their own dressmaking. No general answer can be given to this question; it depends entirely upon circumstances. For people who have plenty of leisure, it goes without saying that a very great economy can be effected by making dresses at home. This saving is made not only, and, it may be added, not chiefly, in the dressmaker's fees, but rather in the amount of material used, and in the work of re-making, turning, and manufacturing old clothes into new ones. Professional dressmakers, being busy, do not give the time to planning and contriving which private individuals who are anxious to make much out of little are glad to bestow; and thus we often hear those who have made their own dresses say that they have made a dress out of a surprisingly small quantity of material, or that a dress which looks very becoming has cost a mere trifle. When, however, we come to inquire into the mystery, we find that the worker, before buying her fabric, calculated most carefully how much—or, rather, how little—she would need to use, and did not buy even a couple of inches more than was necessary, while all her etceteras were obtained by turning to good account articles which seemed fit only for the rag-bag. It is the trifles connected with dressmaking which make it expensive, and the value of home dressmaking consists in reducing these to a minimum.

All this is very true, and there is no denying that in households where there are three or four girls without any fixed occupation, a very great economy might be effected if all would make a practice of making their own dresses.

At the same time we have to remember that, as regards beauty and becomingness, the fit of a garment is a matter of much greater importance than the quality of the material of which it is made. A dress made of material costing 6d. per yard which fits perfectly, which is gracefully draped, and which is in harmony with the figure of the wearer, is a greater success than a dress which fits badly, and is out of harmony with the figure, even though the latter is made of most costly material. In the long run also the well-fitting garment will be the

more economical of the two, because the wearer will like it for a longer time, will discover that it suits her, will take full service out of it, and will probably do her best to take care of it. The costly, badly fitting garment she will soon get tired of. Whilst it is a novelty she may rejoice in it; but the novelty once gone, she will realise that it is a failure, and this fact once acknowledged, nine women out of ten would dispose of the dress before it was half-worn. From all this it follows that it is no economy to make dresses at home unless the dresses are satisfactory when made. If business of this sort is not well done, it is wastefully done.

Nor must it be supposed that to make a dress properly is an easy task for the amateur. Ignorant persons often fancy that dressmaking is the sort of work that any one can do who will bestow a little time upon it. This, however, is by no means the case. To make a dress successfully, calls for time, patience, perseverance, power of observation, and a firm determination not to be discouraged by failure. It is almost impossible to make a dress properly the first time of trying. People who imagine they can do it, have no idea of what a dress is like when it is properly made. If dressmaking were as easy as they fancy, we should not have the fact staring us in the face that the cleverest dressmakers have given years to the business of attaining proficiency in their art, and that there are numbers of women who have "worked at dressmaking" every day for years, who are yet quite unable to produce a well-fitting and becoming garment. Without doubt the reason of the inability of these persons is, that in dressmaking establishments workers are kept to one kind of work only, and never obtain an idea of the business as a whole. Hence it comes to pass that those only who have the faculty of observation, and who are quick enough to pick up hints and ideas from what is going on around them, gain the necessary knowledge. But that this quickness of perception is indispensable, proves that dressmaking is not easy work.

There is another aspect of the question which is worth thinking about. Many of the people who make their dresses at home give the whole of their leisure to the business. They spend their lives in

answering the question, "Wherewithal shall I be clothed?" Life is given us for something more than this. Even in the case of the family of girls already referred to, it is open to question whether they would not make more, get more, and be more, if they were to go out and earn their own living, and place the making of their dresses in the hands of one of the thousands who have to earn their bread at the point of the needle, than they now do spending all their days in contriving and sewing. We do not gain broad views of life, or become acquainted with the best that has been thought and felt, when we bend our heads continually over a needle.

Yet though we may accept all these considerations as true, we know that there still remains a large number of women who are compelled by circumstances to do their own dressmaking. The very wisest thing which people who want to be able to make their own dresses satisfactorily could do would be to take, very early in the proceedings, a few good lessons in dresscutting, dressmaking, and draping. In these days the facilities for gaining instruction of this sort are very numerous. In almost every large town of any consequence (both in England and the colonies) schools of needlework are established, where students, on payment of a fee of one or two guineas, may attend on stated days, and master the science and art of cutting out and making up dresses. The Scientific Dressmaking Association, whose head offices are situated at 272, Regent Circus, London, is one of these; and the Anglo-Parisian Associated School of Dresscutting, 71, Princes Street, Edinburgh, is another. In addition to these, there are technical schools and private schools innumerable, where most efficient instruction is given. Any one who will take a little pains to inquire in her own locality, is almost sure to hear of one of these institutions; while persons who reside in a district where there is no such school, may even arrange with the Scientific Dressmaking Association to take lessons in dressmaking by correspondence. These correspondence lessons are a great convenience.

Since these dressmaking schools were established, thousands of ladies have by their help mastered the details of the art of dressmaking, and now economise much by making their own and their children's garments. Experts tell us, indeed, that a woman of ordinary intelligence, who has had the advantage of taking a course of lessons in dressmaking, rarely finds any difficulty in fitting a dress well; the part of the business which she usually discovers to be a stumbling-block is the draping of the dress. When amateurs fail in fitting, they usually do so through want of care and exactness in taking their measurements. This detail is, indeed, of the greatest im-

portance; if the measurements taken are incorrect, and as a consequence the dress is badly cut, no amount of care in making it up, and no expenditure of time or money bestowed upon it, can possibly make it a success.

Individuals who have taken lessons at one of the schools of dressmaking are usually, at the conclusion of their course of study, provided with a chart, by means of which they are enabled to take measurements of their own figures correctly. This chart is a network of lines and numbers, and the uninitiated would find it somewhat of a bewilderment. To those, however, who have the knowledge to understand it, it is a great assistance; and armed with her chart, the amateur dressmaker usually feels that she can defy criticism.

It is generally found that ladies of average intelligence and education who attend the dressmaking schools, can master the mysteries of measuring and cutting out a dress in six or eight lessons of two hours each. Nevertheless, the arrangement is generally made that the learner shall be at liberty to attend the class until she is thoroughly competent in her work. Yet it must be confessed that there are persons whom no amount of instruction will render competent in this direction. Really clever dressmakers are like poets in one particular—they are born, not made; and although patience, industry, perseverance, and attention will undoubtedly enable a person who naturally cares little for dress to construct garments respectably, such garments would never pass muster amongst those which had been made by an individual who had a genius and an eye for dressmaking.

The Sewing.—After taking lessons, the next thing which any one who seriously intended to make dresses at home should try to do, is to procure a sewing machine. It is probable that in these days every woman has realised the help which such a machine can give; yet none but those who have tried to make a dress without a machine, know how many stitches must go into it before it is complete. When a needle has to be pushed in and out for each stitch, the time which a dress must occupy in making is a consideration. The people who say they get their dresses for nothing, never allow anything for their time; that is put in as worthless. If, however, the stitches can be run through with a machine, the garment will be made in a quarter of the time.

An interesting incident occurred some time ago, and was published in the *Reichenberger Zeitung*, which shows that the number of stitches put into a garment made without a machine is very large. A Vienna tailor laid a wager that it took more than forty thousand stitches to make a winter overcoat.

To decide the question a coat was ordered, and a committee of experts sat to superintend the work, as well as to see that no unnecessary stitches were made. The result was announced as follows:—Body of the coat, 4,780 stitches; collar, 8,063; sewing collar on, 1,763; buttonholes, 2,520; sleeves, with lining, 980; pockets, 924; silk lining of body, with wadded interior, 17,863; braiding, 2,726. Total, 39,619 stitches.

One reason why, if possible, a machine should be employed for dressmaking, is that in this branch of needlework fine neat sewing is not of special value. Good firm sewing is necessary to make the garment last; but it is generally the case that the most charming dresses are made by people who sew quickly rather than neatly, and who have regard to the result as a whole, rather than to perfection of detail. Undoubtedly a woman must be a good sewer before she can make a dress, but she is not more likely to succeed in this department because she is a very neat fine sewer.

Tailor-made Dresses.—Of late years what are called "tailor-made dresses" have been much approved. These are simply dresses which are made well and sewn strongly, and in which the measurements are taken from the figure, as tailors take the measure of men's garments. When workers understand their business sufficiently to make garments according to this method, they are much more likely to obtain a good fit than they are when they cut their garments from a pattern bodice. The annexed diagrams will show how measurements of this sort are taken. It will be remembered that when tailors are measuring a gentleman for a coat they always have a yard measure, a note-book, and a pencil. They measure certain points and make a note

of the result. From their notes the pattern of the garment to be made is obtained, the measures are drawn on a large piece of paper, lines are traced from one important point to another, and thus an exact pattern is secured.

In any case, a tailor-made dress is simply a dress cut from measurements and thoroughly sewn. In these days it does not at all follow that because a dress is said to be "tailor-made," therefore it has been made by a man-tailor. Numbers of women now make dresses according to this method.

Measures.—The accompanying diagrams serve to illustrate the mode of measuring. The numbers there refer simply to the order in which the measurements are taken. Thus the first measure is made from the neck to the waist—this, therefore, is No. 1; No. 2 is the measurement round the neck; No. 3 is the width across the chest, from

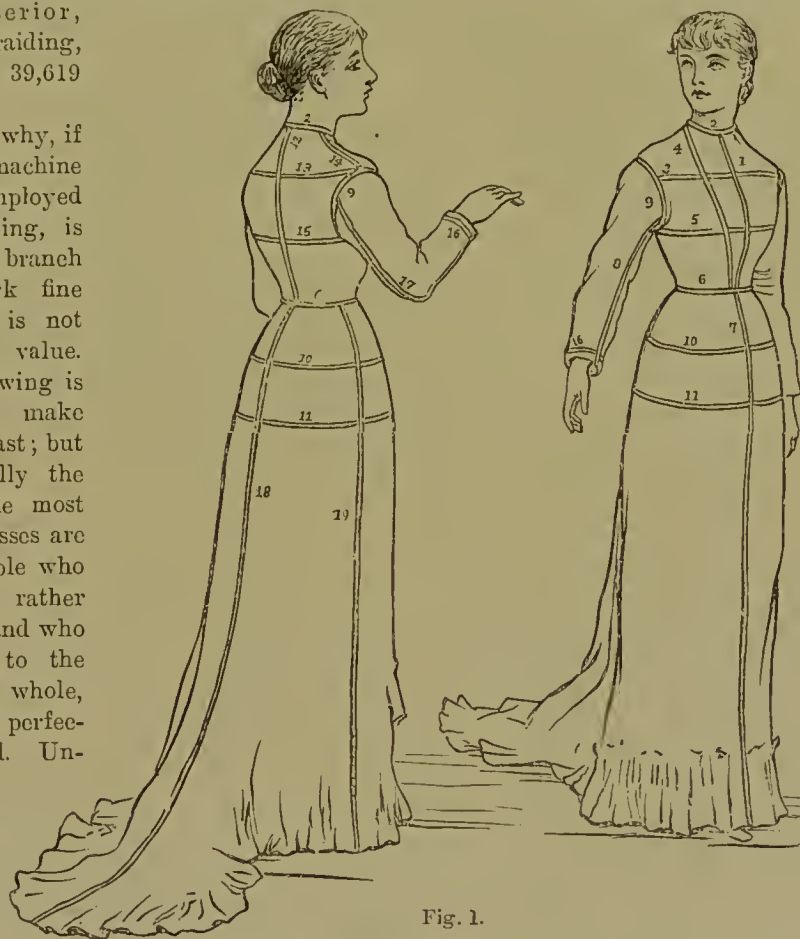


Fig. 1.

the top of the arm; No. 4 is in a slanting direction, from the shoulder to the waist; No. 5 gives the size round the bust, close under the arms; No. 6 is the width of the waist; No. 7 gives the measurement from the waist to the bottom of the skirt in front; and so on. Any one who will consult the numbers, will see where the measurements are taken, and in what order. The length of the sleeve is taken from the outside when the elbow is bent, and the length of the upper part of the sleeve is about two inches longer than the under part.

Excellent though this method may be, it is not likely that amateurs would succeed in it. They will be much more likely to accomplish their purpose of making their own dresses satisfactorily, if they do not attempt too much at once. The very best way by which amateurs who cannot have proper lessons may learn dressmaking, is to begin by turning an

old dress, simply made. For the sake of the experience gained thereby, it is well worth while to unpick and re-make a dress, even though it would otherwise be thrown aside. During the process of unpicking and re-making, the worker would acquaint herself with the details which are required in putting a dress together, and through failure would learn much that no amount of verbal instruction would supply. The work would be tedious, without doubt, but it would be very beneficial. An authority in dressmaking once said that "dressmaking is not difficult work; it does not require genius; it only requires an infinite capacity for taking trouble." It is well to remember that it is scarcely possible for an amateur to take too much trouble, if she intends to make dresses which shall fit well and be becoming.

Having turned an old dress, the next best thing to do is to copy it in new material. The fabric chosen should be inexpensive, so that it will not cause great loss if it does not turn out well; it should be without pattern, and it should be the same on both sides. Materials with a pattern, or which are not alike on both sides, present unexpected difficulties to the beginner, and are apt to produce confusion. They need to be cut with great care, in order to make the parts correspond, and also to prevent waste. The pattern of stripes and plaids, for example, must join neatly, or the dress will look very unsightly; and patterns, such as flowers, which run in a particular direction, must go the same way on the body, the skirt, and the sleeves. If, after these precautions have been taken, the garment should be a failure, no great harm will be done, and there will be no occasion for profound regret. Yet whether the copied robe is a success or not, the dressmaker will be the gainer. It would be an impossibility for a worker to accomplish thus much—that is, turn a dress and copy a dress—without making considerable progress in acquaintance with the art of dressmaking.

The Bodice-Pattern.—Before setting to work, however, even to copy a dress, it would be necessary to have a good bodice-pattern. There are two ways of obtaining a satisfactory pattern for a dress-bodice. One is to purchase a model pattern from a pattern-dealer. Patterns are now sold of every size, and it is easy to purchase one very nearly of the required size by taking the necessary measure beforehand. To measure for a bodice-pattern, or for the pattern of any garment requiring a bust-measure, put the measure around the body close under the arms, and draw it closely, but not too tightly; note the number of inches, and order accordingly. The patterns which are sold by the best pattern-dealers are cut out by experts; they are almost certain to be properly proportioned, and

they show how much material should be allowed for turnings-in. When sending them, the dealers state how much material will be needed, and how much lining will be required for a given width. These patterns are not expensive; but the amateur who possesses one will certainly find that, for her, dress-making has been made easy.

Another way to get a satisfactory pattern-bodice is to take an old bodice cut by a good dressmaker, which fits accurately, and use it as a model upon which other dresses can be made. For this purpose it should be unpicked with the greatest care, the ends of thread taken out, and one-half—i.e., one front, one side-piece, and half the back—pasted upon tissue-paper. When dry, these shapes should be cut out with a sharp pair of scissors exactly along the line where the seams were sewn, by the stitch-marks. This will give the exact pattern without turnings. The remaining front, side-piece, and half the back, should be pasted on tissue-paper in a similar manner, with the turnings left, and both should have the name and date written plainly upon them.

Patterns of the kind thus described are most valuable, and once procured, they should be preserved with scrupulous care. When the pattern-bodice has to be taken from a dress which has been worn, it is worth while, if the figure alters, to have a dress made specially by a high-class dressmaker simply to secure the pattern. If, on the other hand, a pattern-bodice is bought, the pieces should be pasted on stiff paper, as already recommended for the worn bodice. At any rate, it may be taken for granted that, unless possessed of a well-fitting and well-cut pattern-bodice, it is almost impossible for an amateur to make dresses at home with any degree of satisfaction.

The accompanying diagram (Fig. 2) gives a representation of the pieces of which the pattern-bodice—whether bought at the pattern-dealer's or taken from an old dress—will be composed. A A are the two fronts, with dotted lines which suggest where the gores may be; B B are the two backs; C C, the two side-pieces; D D, the two fronts of sleeves; and E E, the two backs of sleeves. The dotted line in one of the sleeves shows the position of the under part of the sleeve.

With regard to this diagram, it may be noted that the gores in the front of a bodice-lining should be marked, but not cut. If there is any uncertainty as to the situation of the front gores, divide the width of the chest into three, and begin the first gore at one-third of the distance from the front taken at the waist. The second gore is taken again at the third of the distance. Gores should not be too straight; they should slope inwards towards the waist. Also, they must on no account be too high. The height is regulated by the position of the bosom.

When a good pattern is obtained, the business of dressmaking may proceed without hindrance. In order to practise it with comfort, however, the undisturbed use of a room, or the best part of one, is an essential requisite; and so also is the use of a large table, at least six feet long by four wide, which need

scissors, chalk, a piercer, a yard-measure, hooks and eyes, lining, piping, wax, and a leaden pin-cushion. A word may be said as to the choice of one or two of these items.

Cottons and Silks.—For basting and tacking,

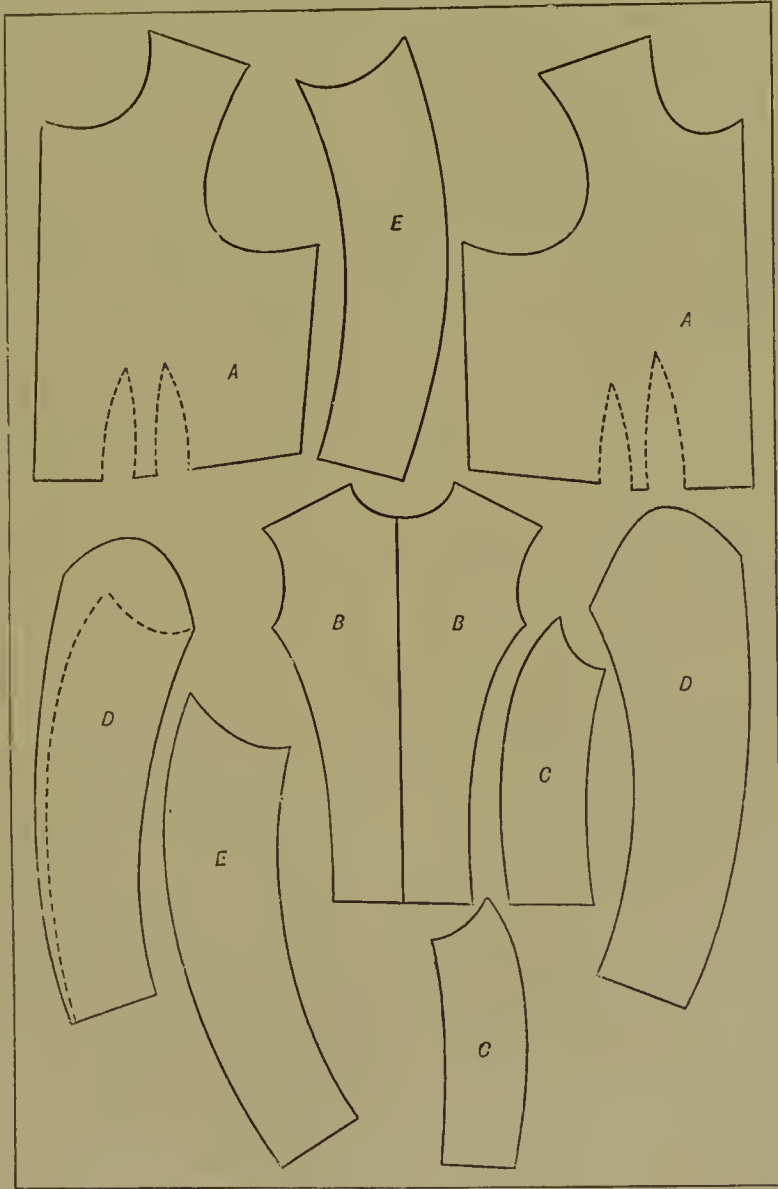


Fig. 2.—PIECES OF A BODICE.

not be cleared for meals, nor for any other household necessity. This table should be of such a common ordinary kind as to give no occasion for fear that it will be spoilt in the using. Some people prefer a covering of green baize, drawn in tightly under the top; or a board with trestles, instead of a table. The other requisites are pins, needles, cottons, and silks, for basting and machine use; a large pair of cutting-out scissors, small-sized and button-hole

common cheap coloured reels are good enough. Red and pink are usually the best amongst these, for the colours are easily seen. Of ordinary sewing-cotton, the most useful sizes are 30, 36, and 40. In choosing sewing-silk, remember always to choose it a little darker than the dress; because silk on the reel, or in the skein, looks darker than when sewn. What is known as silk-twist will be needed for the button-holes. This is sold by the yard.

Linings.—Of late years, fancy linings of excellent quality have been used for bodices, and some of these are very durable and strong. Nevertheless, it would be difficult to find anything which is more satisfactory, on the whole, than the old-fashioned lining of strong twill known as Silesia. Whatever kind of lining is preferred, the great point to remember is that a light-coloured lining must not be used for a dark-coloured dress, or a dark lining for a light dress, otherwise the seams will soon look shabby. For skirt-linings, alpaca of different qualities and Victoria lawn are generally used.

If the material to be made up is very delicate, it is well to spread a clean sheet on the floor, and to cover the work well when it is left for a while. It is a mistake to let the work lie about for a long time. Once commenced, the attempt should be made to get through with it, putting other business aside in order to complete it. A dress which is long in the making loses its fresh appearance, and becomes limp before it is worn. In dressmaking, what is well done is generally quickly done.

Skilled dressmakers do not hesitate to cut the lining and the material at the same time. Amateurs would be very unwise to do this. They should cut the lining first, tack it together, and try it on, wrong side outwards. When it fits satisfactorily, they may mark the place of the seams distinctly, tack the pieces of lining upon the material, and proceed to cut it out. But in any case they should never think to save time by doing without abundant tacking and fixing. Before the scissors are used at all the pieces of the pattern should be laid on the material and either tacked or pinned into position.

It must not be forgotten that the front of the body, the back, the side-pieces, the skirt from waist to hem, all strips, bands, &c., must be taken the straight way of the stuff—that is, they must be parallel with the selvage. Unless this rule is attended to, the dress will not lie properly, but will drag, pucker, and crease. The pattern must not even slant a little on the material, but must lie quite easily on a line with the selvage line. Sometimes it seems that by pulling the pattern only a little, it could be made to fall within the edge, but the attempt to do this should never be made. At the same time it is very easy to effect an economy in cutting out by arranging to put in false hems when necessary, or to insert small gussets in out-of-the-way corners. Yet even these linings and these gussets must “run with the material,” or they will be untidy. It is a rule in dressmaking that “linings should be cut the same way as the materials they line.” Corners, rounded parts, bindings, and pipings may be, however, taken from the cross.

Sleeves, though cut on the cross from elbow to

wrist, must be cut *down* the material, or they will not set properly. It must not be forgotten that the measurement of a sleeve is taken outside the arm, when the arm is bent. The length of the sleeve above the arm is about two inches longer than that under the arm when the sleeve is cut out.

To begin to make a dress, then, spread the lining on the table and lay out the pattern upon it, singly. If the stuff be wide enough, two fronts can be cut out of one width, or a front and a back can be taken out of one width, and the side-piece out of the hollow. In any case the paper pattern must be placed straight by a thread in the material, otherwise the bodice will not set well. Do not cut the material at the line of the front, but pierce it all along the line of the edge with the piercer. Do not cut the side-seams either, but pierce the outlines. At the neck, shoulder, side, arm-holes, waist, and front, mark the outline of the pattern, and then cut out the material beyond the prickings, allowing enough to turn in. For shoulder and side seams allow one inch; for the front, an inch and a half; for neck, waist, and arm-hole, half an inch. It is best to allow the waist an inch over, and a little over at the armhole, as the seams work it up, and the perforated outline shows how much it should be taken in if too large.

Sometimes for stout figures the line of the front is rounded instead of being straight. In this case the line of the slope should be marked with the piercer, as the line of the front was before. The amateur must not forget, however, that the two fronts, the two side-pieces, and the two sleeves are for different sides of the body, and they must be cut accordingly. Unless this detail is attended to, part of the material will be wasted.

Having cut the lining, and pierced it, the next business is to try it on. If any alteration requires to be made, try first what making the shoulder-seam a little tighter or a little easier will do. If this is not sufficient, further alterations may be made: but it is wonderful how much can be accomplished by a judicious manipulation of the shoulder-seams. If the dress is too loose, the seams under the arm probably need to be taken in or let out. Very often dresses made by amateurs are uncomfortable because the sleeve is not put in its right place. In this case take it out and move it a little back or forward, and try what the effect will be.

When the lining fits perfectly, untack it, and cut the material by it. Lay the front of the dress-stuff on the table, face downwards; lay the pieces of lining on it, and tack each one securely. Be sure that the dress-material lies close to the lining, and is quite smooth and flat. Tack the seams together by the piercings in the lining, and again try the dress on. If all is well, stitch the side-pieces, the shoulder-

pieces, &c., either with sewing-silk or with strong cotton. The gores should be first stitched, beginning from the waist; then the side-seams; lastly the shoulder-seams. Hem the fronts; stitch down the edge of the fronts near the extremity with silk; cut the waist-band (which must of course be the straight way of the stuff) an inch and a half wide. Turn down half an inch. Pin or tack it along the waist, pinning the body to the leaden cushion to keep it straight. Open the seams, and iron them down flat; after pressing, overcast the edges, or bind them down with narrow galloon; run on bone-cases; cut a lining for the band, lay it on the back of the dress, and hem it so that the stitches come just below the stitching on the right side—they must not show through. Turn in the edge of the band made of the

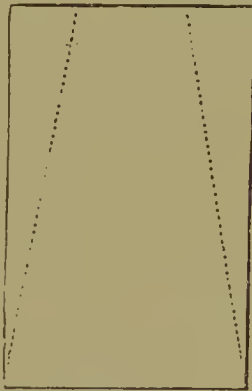


Fig. 3.



Fig. 4.

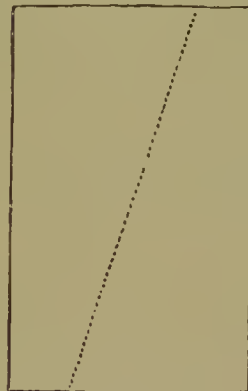


Fig. 5.

material and the edge of the lining-band; tack them together, then neatly sew the edges, or merely run them finely together. Put the band on the neck; fold over the right side of the body, and make the button-holes down the front. Sew on the buttons loosely, and have sewing-silk twisted round and round the loops which fasten them. This makes them very secure; and if they are fastened close to the dress, they cannot be buttoned easily. Lastly sew in the sleeves. Before doing this, pin them into their place, and be sure that they are right. The top seam of the sleeve should for an adult be about an inch behind the shoulder-seam of the dress. The bend of the elbow also should come exactly in the right place. Sleeves should be back-stitched in; and, to prevent puckering, the sewer should hold the sleeve, not the bodice, near her. If the sleeve is larger than the armhole, a little pleat should be put into the bodice under the arm.

When everything else is done, whalebones (if any) may be inserted in their easings, and fastened neatly down. Tacking-threads should not be removed until the dress is quite finished. In sewing down pipings, the stitches should not be taken through to the right side.

The Skirt.—The fashion in skirts changes continually, so that for making skirts generally it is almost useless to go into details. Whatever the mode, however, the great aim must be to get the garment to hang properly. If it is uneven, or if it is too long in one part, or too short in another, it looks very untidy. The way in which a skirt hangs is indeed a detail of so much importance, that dresses which are put out to be made should always be tried on as soon as they are brought home, in order that it may be discovered if they hang properly. A dress which hangs too low in any part becomes worn and dirty in that part.

Whatever the fashion, it is an advantage to know how to make both gored and ungored skirts; therefore the following hints may be of value:—

For a Gored Skirt.—The front breadth of a skirt should always be cut first, and made of the right length. If the back is to be long, the extra length should be divided between the back breadth and the gores next to it. To make a skirt hang evenly, lay it on the floor after the seams are run together; then get the measures of the front, those of the back, and those of the sides, and draw a curved line from one point to the other. Heavy material such as silk velvet, cloth, serge, &c., should always have a deep false hem of alpaca or stiff muslin at the bottom. Professional dressmakers very often line the back of dresses which are to be worn out of doors with American cloth, which can be washed when dirty.

There are two ways of goring dress-breadths. The first, which is usually adopted for front breadths, is to take a piece off each side of the material, as in Fig. 3.

The second way is to gore the width in half, like Fig. 5. Breadths must be divided in half for right and left sides. Sometimes people err in thinking that a gored breadth can be placed half on each side; and, in the same way, they will cut two left body-fronts or two right sleeves by neglecting to turn the

pattern. If the material be the same on both sides this makes no difference, but it seldom is. Both the gores from Fig. 5 must be used on one side; from another piece on the other. The gores which come on the hip must be sloped away about an inch in width and two or three inches long at A (see Fig. 4) to make them sit evenly and round, as shown by the dotted line in the figure.

Before sewing a gored skirt, pin up the breadths—a sloped edge and a straight edge—together respectively. Begin to sew at the top, and keep the work even, without straining it. Allow an inch longer than seems to be needed, as it takes up in working. When the seams are done, lay the skirt on the floor; find out and mark with chalk the exact length of the front, the back, and the sides; then draw a round line from one point to the other; this will show

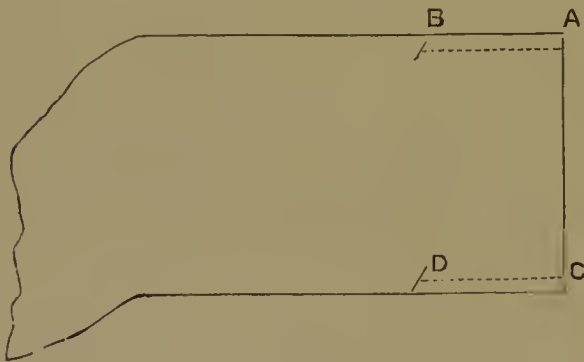


Fig. 6.

where the lining is to be sewn. Now cut the breadths of the lining for the hem. Run the lining on the outside to the edge of the skirt, turn it over, tack it down one inch. Lay the skirt upon the table. Pin down or tack the lining, sloping it as required, and turn it in at the top while sewing. If the trimming of the dress will not cover the lining, tack it well to every seam, and up the seam, and catch it here and there lightly along the top, not showing the stitch more than can be avoided.

For a Straight Skirt.—To make an ungored skirt, first prepare the breadths and pin them together. Begin both to pin and sew from the bottom, and run them neatly, taking a back-stitch frequently. Keep the edges very even, and do not pass the material round the finger, or the seam will be puckered. The placket-hole should not come in a seam.

To Line a Straight Skirt.—Join the breadths as already described, but do not join the last but one to the first. Make up the lining precisely the same. Lay on the table as much of the skirt as will cover it, and the lining upon the skirt. Take two needles and tack along the top as it lies on the table, leaving in the needle till a seam is reached (A to B, Fig. 6). Tack along the bottom the same way (C to D).

Then fold back the lining, and with a third needle tack the selvage of the lining-seam to the selvage of the material-seam (B to D). Lay the lining back again, and tack along as before with the needles No. 1 and No. 2 till another seam is reached, which must be run as the former seam was run before with needle No. 3. When all is tacked that is laid on the table, take hold of the ends A and C, fold over a few inches, and repeat the process again and again, until all is folded that was tacked. Then draw as much more as will cover the table. (See Fig. 7.) The foldings should be very even.

When all this is done, run the skirt together by the first and last breadth of the material, leaving the lining. Afterwards run the lining together. Lay it again on the table and catch down the lining, not taking the stitches through. Now turn down and



Fig. 7.

tack half an inch all round the bottom. Then turn down the hem, pin and tack it. Turn in all round the top the lining and material together, so as to leave no raw edges. Run this turning close to the top; hem the bottom, not taking the stitches through more than the lining.

Braid should always be held lightly and easily when being sewn on, and the stitches should not be tightly pulled; for if they are, the work will look puckered. It is a good plan to bind the braid over the edge of the hem.

Pockets lie most evenly when cut flat, somewhat in the shape of a kite. They should be rather longer than twice the full length of the hand, and rather wider than the doubled fist. These measurements should be taken exclusive of seams. The material, cut double, should be stitched all round, turned over, and stitched all round again. The opening should be made straight down two-thirds of the middle of the pocket. If the material used is thin, the lower part of the pocket should be lined as well as the inside portion of the top. When finished, the pocket should be put between the first and second gores if there are two gores, and between the gore and the

back breadth if there is only one. The pocket-hole should be about three inches below the waist.

Dress-skirts are usually sewn into a band made of Petersham, a sort of ribbon very strongly made. The mode of gathering in a skirt varies constantly.

To Make Frills and Flounces.—Those run and drawn are cut on the cross, and may be plain-hemmed or roll-hemmed. The roll is done in this way:—Turn down three-parts of an inch from the edge on the wrong side, and run it all along as near the fold as possible; then turn down and hem the edge to the ridge this running makes, and be sure not to take the stitches through. To draw the flounce with a heading, turn down the head and run it with strong cotton.

Some flounces are cut on the cross, and bound top and bottom with silk or satin. To bind a flounce, cut narrow bands of the satin on the cross; run the satin to the material on the right side; turn it over and hem it on the wrong side. Bind both edges. Run on the flounce by gathering it, or running in a cord. Some flounces have a bias band or trimming over the gathers.

Pleated flounces, or frills and pleated trimmings, are cut on the straight. They are bound or plain-hemmed at each edge. A pretty way of putting on a flounce bound with satin of another colour is like Fig. 8. The top is bound and lined with satin as



Fig. 8.

In the diagram the folds of the flounce are close together, to save space, but in reality each fold should be about the width of a pleat apart.

What is known as *Kilt-pleating* is very much used. It is cut straight, and consists of very close, fine, full pleats. The top and bottom are hemmed. Lay it on the skirt (like Fig. 9), pin each fold from A to B, and again go round and pin them at C. Stitch on the flounce all along at A. A band or trimming may or may not be laid on here. Turn the skirt on the wrong side, and

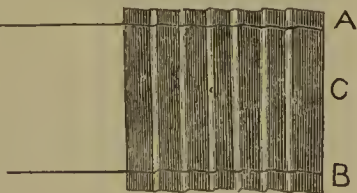


Fig. 9.

run it along, lightly catching the flounce all round at C, but not letting the stitches show on the right side.

Kilt-pleating is most usual on short skirts. There may be one or two rows, with or without a folded

heading. (Fig. 10 shows this latter trimming.) Both edges are hemmed. It is pleated on at both edges, and is the proper tunic trimming for a kilt-flounced skirt.



Fig. 10.

Bias Bands are frequently in fashion. They take little stuff, but are not laid on very easily, and should be cut completely on the cross. Fold over the end of the material, and cut it off on the slant from A to B (Fig. 11); then continue cutting the bands. Join the breadths of the bands. They must be piped with a different material. Cut the pipings also on the cross, about half an inch wide; join them. Fold the piping in half. Cord is not generally employed, but its use is optional. Run the piping to the edge of the band each side. Lay the skirt on the table, lay on the bias, and pin and tack at both edges very flat; then, holding it in the hand, run very finely between the edge of the material and the piping, taking the stitches on the piping. The stitches should not be perceived when the skirt is finished.

Box-pleats are those which are turned both ways.

Quilling is a number of little pleats made in ribbon, blonde, or narrow material, like the kilt-pleating. (Fig. 9.) Sometimes the thread is at the centre, sometimes at one edge.

Ruching is a pleat turned each way (like Fig. 8), the thread being in the centre.

Double Ruching is made by taking first two pleats one way, and then two pleats the other. The upper pleats should be just smaller than the other, to show both. A pretty fancy ruching can be thus made, and the two edges of the upper ruche caught together in the centre.

The suggestions given here are of a very elementary character; they are, however, likely to be always of value, no matter what the fashions may be.

When amateurs resolve to make their dresses at home, they will find it a great assistance to employ by the day a workwoman who is not exactly a skilled dressmaker, but employed as an assistant to dress-making firms. Almost always there are numbers of these young women out of employment, and their acquaintance with the detail of dressmaking is of value. They could not do much alone, but if they could work with the members of the family, the work would be more speedily got out of hand.

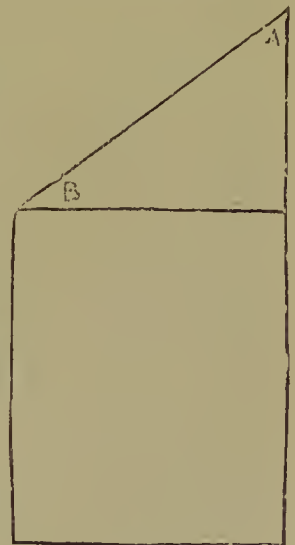


Fig. 11.

BRIC-À-BRAC.

THE term *bric-à-brac* may be applied to the prettinesses of modern furnishing, the breakable things that add so much to the appearance of our rooms, yet are extremely cheap and, many people would say, "trashy." The jargon of these matters is quite a language by itself, and a glib youth in a suburban all-sorts shop will pose a knowing head on one side, and hold out a "bit of colour" and discourse on its value in the same breath with which he informs the would-be purchaser that the price is "only 3^d." The taste for pretty trifles certainly grows by what it feeds on, and they are anything but hard to get. The smallest drapers now keep an assortment of Oriental china and nicknacks, and at Christmas-time all the bazaars of the East seem to overflow into London, and from thence down to the remotest country corners.

Mantelpiece Ornaments.—The first place that suggests itself in every home as looking bare if left without ornaments, is the ordinary mantelpiece, whether it be of plain old-fashioned marble, or widened by a board covered with cloth or velvet, and edged with a fringe or border. In a dining-room, with a large mirror over the fireplace, there really is nothing to beat bronzes, or bronze and marble; and in a large handsome room they ought to be of proportionate size. If the dark character of these ornaments is considered too sombre, it is easy to place between them a few bright flowers in a couple of pretty glasses, or to put a bit or two of bright-coloured modern pottery with a long neck and bulbous base; and these are all the better for having a single flower in them, such as a camellia in winter or a rose in summer. Reflected in the mirror behind, the pretty effect of them is literally doubled.

Nearly all of us can remember the stereotyped ornaments in the ordinary drawing-room of, say, twenty years ago: the gilt central clock under a glass shade; the Parian or alabaster figures, also under shades; and the lustres or glass vases capable of being turned into candlesticks, and all hung round with glass "dangles." Many people have them still, and do not care to banish them; and most glass and china shops keep a few in stock, as they are sometimes asked for. No doubt their turn of fashion will come again soon, with the damask hangings and old-fashioned furniture. But supposing that the large mirror is there, without the clock or the figures that are so completely in keeping, the mantelpiece may be furnished without any great expense with the pretty glass vases so usually sold in threes—one centre and two smaller ones. These, filled with flowers, and with four specimen glasses

placed alternately, and also filled with flowers, look charming on a drawing-room chimney-piece, and all the better for being reflected in the glass. In fact, a supply of flowers such as any one with an ordinary country garden and even one greenhouse is sure to have, simplifies the ornamenting of a room in a truly wonderful manner. Photograph-stands or easels also go very well on the ordinary mantelpiece, and so do the delicate china figures in imitation of Dresden that are now so ridiculously cheap. A pair of pretty glass or china candlesticks with candles in them, and glasses and shades, should never be absent from a drawing-room mantelpiece; sometimes one is so glad of the little additional light, on winter afternoons, for instance, when one does not want to draw down the blinds and regularly shut up, or when any one is sitting by the fire and wants a light thrown on book or newspaper. A couple of tasteful lamps, one at each end of the mantelpiece, answer the same purpose; and in houses where there is gas, a bracket on either side, with a pretty-coloured glass to it, adds very much both to the comfort and appearance of that part of the room.

Overmantels.—Where the fireplaces are fitted with overmantels, smaller ornaments are suitable, and almost any kind of small china can be utilised. If there are no treasures in the way of old china, there is plenty of the modern Oriental to be bought; and a sovereign judiciously laid out will go a long way in small pieces. Kaga ware is very cheap indeed, and pretty cups and saucers and small vases are procurable almost everywhere—or, at least, wherever there is a shop devoted to the sale of kus-kus fans, screens, japonaiseries, and art-pots. It is not in the least necessary or even desirable to have the ornamentation of overmantels in pairs; no two pieces of china need be alike; and low specimen glasses, with a bright flower or two, will stand almost anywhere on them. Fig. 1, drawn from an example, will illustrate this absence of duplicate symmetry, and the entire "freedom of handling," which is quite usual in modern drawing-rooms. At the same time it is not to be understood that right-and-left duplication is out of place, either as a whole or in regard to any pair of articles.

In arranging this kind of ornamentation it is always wise to have the delicate well-finished things that will bear looking into at the lower part and on the level of the eye; coarser things can go nearer the top, and really have quite as good, if not a better, effect. Colour is often given by means of the cheap little Japanese fans that cost about a penny each; and, in fact, almost any trifle may find its

corner. The pretty blue-and-white china that we were exhorted to "live up to" a few years ago is now very inexpensive; quite nice vases may be had for 6d. each; and a judicious mixture of these with the equally cheap Kaga ware is all that can be desired by any one who is neither a collector nor a connoisseur.

The origin of "blue-and-white" is thus accounted for, according to Chinese story:—"In the year 954 a potter having petitioned Tchitsong to order a model, the Emperor replied, 'For the future let the porcelain for the use of the palace be of the blue as the heavens appear after rain.'"

Cabinets.—A cabinet calls for somewhat bolder treatment—at all events, outside. Small china looks very nice on the glass-protected shelves that generally form either the centre or the sides, but outside, large pots and vases are the proper things. One big brass pot with a palm, or a large fern, or a papyrus plant in it goes a long way and gives a great deal of character. One of these can be

had for about 12s., and it lasts for ever, if properly treated. Large pots of red, green, yellow, or blue cost from 1s. to 4s. each, according to the tint, and also according to whether there is or is not a flaw in them. Extremely pretty pots and saucers of modern painted earthenware, something like Worcester or Derby, but rather nondescript, are very ornamental and nice to take pots of ferns or other plants. Maiden-hairs; and what are commonly called Maltese ferns will flourish for months in a position of this kind; and so will common lady ferns if put in pots, where they are plentiful and others are hard to get at. Sun burns them up; but a cabinet does not exactly stand in a window, and if supplied with water, and occasionally watered overhead out of doors from a fine rose, they last and do well. We have heard

of a stuffy London house that was somewhat noted for a very large Maltese fern that stood in the hall for years. It was one servant's duty to bring up a pail of cold water the last thing every night, plunge the fern into it, and return it to the jar in which it ordinarily stood the first thing every morning.

Cabinets are capital places for the curios that some families have a habit of collecting; and where any of the members are sailors, many interesting relics are got together. Pieces of glittering spar,

and lead or iron ore, are often put in such positions, and the only thing to be careful about is to see that they do not scratch the polished wood. Mementoes of travel, and treasures culled from places of interest, are much better on or in a cabinet, where they are in constant sight, than when hidden away, and only now and then taken out and gazed at. A cabinet is very often filled with china, if the owners are fortunate enough to have anything like a collection.

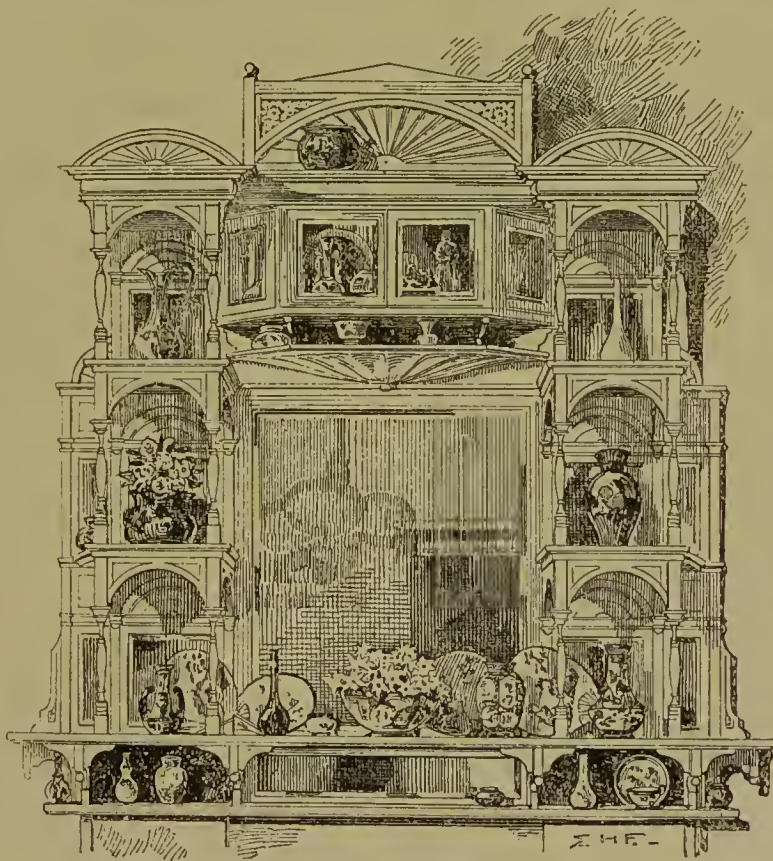


Fig. 1.—AN OVERMANTEL FURNISHED.

Lamps.—Lamps that are for ornament as well as use,

stand well, after they have been trimmed and refilled and carefully wiped, on a cabinet or chiffonier; and when they are thus in the room, there is the comfortable feeling of independence, that if necessary you can light them without ringing for them to be brought in; and, besides, they are very much safer when thus standing in their appointed places than in scullery or lamp-room. Moreover, where lamps are necessities, and there is not a great deal of money to spare for ornaments, they fill up gaps that would otherwise be naked and unsightly, and do it all the better if they have pretty shades on them.

Every possible colour and variety of design in lamp-covers and shades can now be had for oil lamps. Modern or antique, or any harmony of

colour desired, can be selected for the illuminating portion, whilst dark or white bronze, oxidised silver, copper, burnished brass, or bright silver may be had for the metal stand in all variety of design. Beautiful pillar lamps, in nearly as great variety, can be had at the better class of shops even for gas, and many gas brackets are of very chaste and tasteful design, so that these adjuncts may be made to take no unimportant part in the general effect of the room.

Sideboard Ornaments.—The sideboard is *the* place for the *vaisselle*, for any plate the house affords; and in great houses where there is silver plate, it looks very handsome there. Many humbler people range their electro-plate salvers, cruets, &c., also on the sideboard; but this is less done than formerly, probably because electro, of which there are many qualities, tarnishes rapidly wherever there is gas, with or without the combination of damp in the atmosphere, and also because it wears off, leaving a brassy surface exposed, that is neither sightly nor pleasant. Those who like to keep up the old traditions, but to do it with things that do not profess to be what they are not, will in these days find that they can get brass salvers of very good quality, really artistic and well engraved, for from 7s. 6d. or 12s. each down to 6d., according to size. They can be kept beautifully clean and bright with very little labour; and a large one to stand on its edge in the centre, flanked by smaller ones on either side, has an admirable effect. They are useful for all the purposes of plated salvers; and by purchasing a red-lacquered fold-up stand made on purpose, the largest one can be made to fulfil all the necessities of an afternoon tea-table. In fact, this is one of the newest kinds of tea-table that have been introduced.

Keeping the plate on the sideboard is a custom that has its *raison-d'être* in the desirability of having everything useful for table service handy, so that it is not being perpetually carried about. Glass jugs for water are in these days very ornamental, and a crystal pitcher and a couple of goblets are great additions to a sideboard. Frosted glass looks as well as anything, and is not very expensive; but the most beautiful things of the kind are the Venetian Salviati ware, the forms of which are as elegant as the decoration is artistic.

Many sideboards are now made with cupboards on either side, and a couple of open shelves in the middle, which often become receptacles for old newspapers and a considerable amount of rubbish. Accumulations of this sort are never desirable, for they not only harbour moth and dust, but cockroaches are very fond of old papers, and thrive and multiply among them. If the shelves are kept clear, it is very

nice to keep a dessert service on them; it is sure to be ornamental, and is far less liable to be broken, being always in sight, to say nothing of the convenience of having dishes handy when fruit is brought home, and a plate in case any one feels inclined to eat an orange or apple between whiles.

Brackets.—Brackets are of many kinds; and perhaps those that produce the maximum of effect at the minimum of cost are the dark-coloured carved wood that people used to bring home from Switzerland years ago, but which are now to be had at every "odds-and-ends" shop in a large town or its suburbs for a few pence, or at most for two or three shillings. That they are often put together in a very slight and trumpery manner causes them to be lightly esteemed; but any one with a small hammer and a few tacks, a little stout wire and a few hinges, can soon obviate that. Such little brackets as these take a Parian figure very nicely; or one of the plaster figures often brought round by wandering Italians, who, over and above copies of sundry time-honoured works of art, make miniature busts of well-known public men, such as the late Lord Beaconsfield or Mr. Gladstone, that look extremely well at a little distance. Brackets of this kind are invaluable for ornamental match-boxes, or for morsels of bright pottery that are more picturesque than useful.

There are still people who do what is called leather-work, and it makes charming brackets, or rather ornaments for strong wooden brackets. If left in the original colour of the leather, it suggests light oak at a little distance; and if the leather flowers and fruit are varnished and stained, it suggests dark oak. Such brackets are admirable resting-places for dark pieces of pottery, or for bronze ornaments; and this same leather-work makes delightful frames for oval mirrors, which, when grouped with brackets containing china or figures on each side, have a very handsome appearance. But—and it is sad to record a *but*—it is in the very nature of carved and moulded leaves and flowers to take the dust; and they look terribly shabby if that dust is left undisturbed. The unstained leather, which reminds one of Grinling Gibbons' carvings, does not show the dust so soon.

Ebonised brackets, with or without a little round of mirror below them, are cheap as well as pretty, and take a bronze classic-looking ewer and corresponding plate, which is set up on edge behind the ewer, with very good effect. These last are to be had from many large London drapery firms at very low prices, especially at Christmas, when such things are imported for presents.

The plush-covered bracket has been invented specially with a view to setting off pretty bits of

china, or single plates, and is admirably suited for its purpose.

Plaques.—Those who possess individual plates of any value often hang them up by wire holders without any bracket at all, and the effect is good, especially in a drawing-room. Plaques are somewhat larger and more saucer-shaped. Perhaps the first impetus to use them for decorative purposes was given fourteen or fifteen years ago, when the annual exhibitions of china-painting were established; but now they are decorated by other methods, and are very cheap. But many young people study china-painting, and produce very creditable and graceful studies of flowers and foliage, of birds and landscapes, and of the human form divine. They may not have such superlative merit as to be worth exhibiting, but they are pleasant to look upon, and are prized by relatives and friends, who gladly adorn their walls with them; and they mark the progress of culture and development of taste.

Plaques are extremely handy in “filling up” a wall. It may look rather bare perhaps, and yet there may seem no room to hang another picture, or chromo, or etching. In such cases two or three plaques, judiciously placed, under or at the sides of the larger decorations, will fill up the space and make the wall look home-like, with no disturbance of anything else.

Étagères.—Étagères are principally little corner or other sets of shelves, mostly with fretwork edges, for the reception of curios or small china. They are not altogether of English origin, and perhaps have never quite taken root in this country; for there is an insecurity about them, born of the difficulties of driving nails securely into lath-and-plaster. Old-fashioned Continental houses were differently built; and so, for that matter, were old English houses; but where a solid beam can be found from which to suspend them, étagères are very valuable as ornamental furniture.

Whatnots.—Square or corner whatnots have already been mentioned. They are usually pieces of furniture very useful for the reception of ostrich-eggs, tambourines, Japanese trays and boxes, but not all of them to be trusted with anything heavy. Trifles suit them best; and how many trifles are there not in every house that are too pretty to throw away, even if they have no intrinsic value? Besides, some of them are relics, and of value to the owner, though to nobody else, and the value passes away with the life that cherishes it.

A very nice and convenient kind of whatnot is combined with a canterbury for music. These are

really good pieces of furniture, and are seldom or never seen of the ginnerack sort; for music is heavy, and the mere weight of it would be a strain on slight woodwork. The weight also keeps the lower part of a whatnot steady, so that the shelf or uppermost stand is safer than in a commoner article.

Circular Mirrors.—The old-fashioned round glasses that made everybody and everything they reflected look exceedingly small, and that suffered a period of neglect, have been rather revived again of late; and a genuine one in massive gilt frame is much esteemed, and promoted to a place of honour on the walls of dining or drawing room. There are many other circular and oval mirrors, made and fitted with candelabra, which, when the candles in them are lit and reflected, are welcome additions to the light of a room in which there is no gas. Such little mirrors as these are frequently made with frames of Dresden china, or the modern imitations of it, that look so pretty, and are so extremely cheap. There is, or was, a shop in St. Paul's Churchyard literally filled with these pretty framed mirrors, dainty little figures, floral candlesticks, &c. Some of the mirrors looked as if framed in roses, large loose-petalled ones, such as *La France*, without any foliage; and roses were also adapted as bedroom candlesticks and as candlestick-glasses; and very dainty a semi-transparent candle looked rising out of them. The trouble with these things, of course, is in keeping them clean, for dust disfigures them; and though grease can be washed off, the washing must be done most carefully, and the wiping dry is even more difficult. Some time ago there was a considerable vogue for mirrors of this kind framed in white leather-work, each spray and leaf being painted with a white enamel. They looked just like china, but naturally were less fragile.

Console Tables.—Console tables are among the things now thought vulgar, but their turn may come again. They were always better when made for and fitted to certain places, than when bought independently. Spaces between windows fitted with them, so that there was a space of mirror reaching the ceiling, and a substantial slab of marble that took a plant or ornament, or recesses treated in the same way, added much to the light and brightness of an otherwise dark room. They were often got up in a cheap, pretentious, gaudy style; and no doubt that has caused them to be looked on with disfavour by the artistically-minded. But such things, sensibly used with regard to the peculiarities of the room in which they are placed, are not always to be despised; and with graceful or handsome plants on them, they lend themselves to beauty, if not picturesqueness.

'They are less suitable, however, for *bric-à-brac* than for flowers or lumps.

Jardinières.—Some of our best potters have expended their skill and taste on making ornamental receptacles for three, five, seven, or more pots of flowers, either in tiers or in oblong or circular forms; in the latter they are usually suitable for putting on stands, so as to form distinct objects in a room, and to fill up spaces that would otherwise look bare and unfurnished. One great secret of the success of a *jardinière* is having plenty of green moss to pack the pots in; and another is having holes in the bottom, through which the water can escape when the plants are watered. The great objection to earthenware *jardinières* is their weight.

The modern hammered brass and iron work lends itself very prettily to the making of these receptacles; and they are not only cheap and artistic, but are so often made by boys and young men at recreative evening classes, that they are at the present time very easy to procure.

Wickerwork is extremely fashionable now, and being light as well as rustic-looking, and not pretending to be anything but what it is, commends itself to the tastes and the purses of a large majority. The shapes are numerous; sometimes there is a basket above and another below; or a very pretty shape has an upper basket, and down below four or five smaller ones, each of which will take a separate pot with a plant in it. The baskets pack best with the roots taken out of the pots they have grown in and filled in with moss, and make charming ornaments either in isolated positions, or when removable so that the upper part can be placed on a table. Things of this kind are also made of plaited rushes, of bamboo and Japanese paper, and of all sorts of odds and ends that were formerly ignored, or supposed to be unsuitable for such purposes.

Cache-Pots.—This term is generally applied to jars or pots or baskets made specially for the purpose of putting a plant in a pot into, so that the said pot, with its plant, may be readily changed. Gardeners very much begrudge seeing nice flourishing plants removed from their greenhouses to wither indoors, and approve of the *cache-pot*, because a plant slipped

into one can easily be removed for watering, or another substituted for it.

Wall-Pockets.—Extremely pretty things are made in china to hang on walls and receive flowers, just as inverted *sabots* are used for anything that does not require water, and pockets or *videpoches* for holding convenient trifles are made of plush, satin, velvet, &c. In fact, the wall-pocket of different kinds is quite one of the features of the day in room-decoration. China pockets are of many kinds and prices; and delicately beautiful as many of the more expensive ones are, there are many made in terracotta, or biscuit-coloured imitation of basketwork, that are very picturesque. At some tileries where large

quantities of ordinary flower-pots are made, a tasteful potter will sometimes, from the materials he has at hand, make extremely pretty rustic things of this kind, that only have a local reputation and sale. Wall-pockets take growing plants very well, such as a few daffodil



Fig. 2.—CACHE-POTS.

bulbs with leaves and flowers, or the flowers gathered with very long stalks and plenty of the spear-like leaves. When ox-eye daisies or marguerites are in bloom, they look lovely with a few of them and some blades of grass; and such things as hawthorn when in flower, acacia, wisteria, laburnum, white and purple irises, and numerous things that are highly decorative, yet somewhat unmanageable in ordinary vases, go well in a wall-pocket. Even in autumn, winter, and very early spring, a good decorative effect may be obtained with bright or deep-coloured foliage, moss, ivy, dried grasses, and hazel catkins when they show the first signs of spring by hanging out their tassels. Another way of filling them, which is most welcome in winter, when flowers are scarce and dear, is with a variety of dried grasses gathered in summer trips and wanderings, and judiciously mingled with the silvery scales of the old-fashioned plant called honesty, with any berries that can be kept for a time, with the orange clumps of seeds from some kinds of iris, and with a few of the "daisy" everlasting which are so accommodating that they will grow and bloom almost anywhere.

The illustrations in Figs. 3 and 4 are intended merely to show the wide variety that is possible in the form of floral decoration. In Fig. 3, the centre

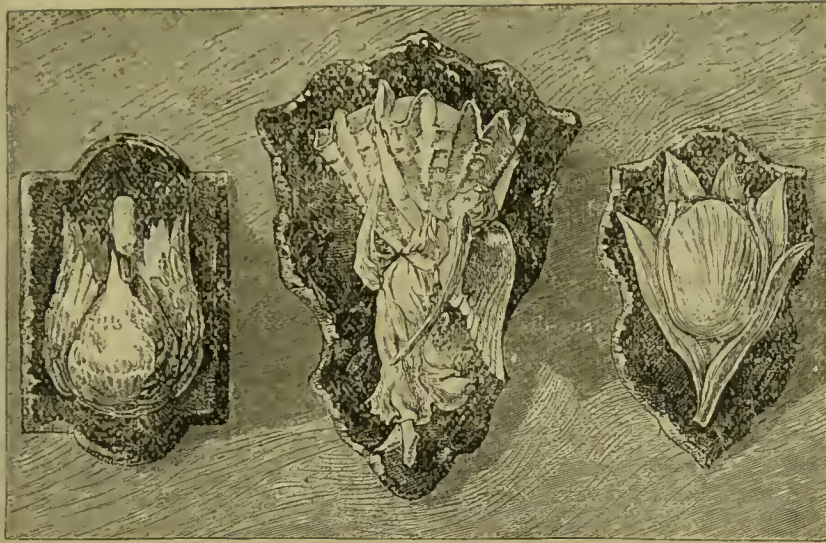


Fig. 3.—WALL POCKETS.

is drawn from a pretty specimen in which the basket is supported by tinted figures, the cost of this class of ornament ranging from 15s. to 30s. It is flanked by simple designs of single flowers in plain white ware, the cost of which will be from 2s. to 3s. each. And Fig. 4 shows a more unconventional treatment, in which vases or baskets, a little flattened at the back for the purpose, are hung on a nail, with or without a panel backing. Baskets with flat backs in "rough" clay or terra cotta work are almost endless; and such things are also made in Palissy and other coloured enamel ware.

China Baskets.—Other receptacles for flowers are so many and various that it is difficult to know how to begin and where to end in speaking of them. Where flowers are plentiful, there is nothing nicer than a white earthenware basket with divisions and one or two handles; and nothing looks better in them than roses, Japanese and other anemones, and small dahlias. Smaller flowers than these are lost. These baskets are of many shapes and sizes, fairly substantial, and are seldom seen in any colours but white and buff.

Glass Vases and Lakes.—Now and then, but not so frequently as might be thought, a good clear cut or moulded glass vase is to be met with, in which all moderate-sized flowers look well. A celery-glass is not necessarily heavy, and it often does double duty, for that delicious vegetable when it is in season, and for flowers at other times. Clear or white glass, or the frosted kind, are extremely nice for flowers, because they are un-

obtrusive, and there is no clashing of colour. There are also the baskets, apparently built up of clear glass rods, which are used sometimes with very little discretion, but when really suitable for the spot, sometimes produce a very cool and pretty effect.

Specimen glasses—only intended, as their name implies, for a single rose or other flower, or a little patch of brightness such as is formed by two or three geranium trusses of the same tint—are very cheap, and quite pretty ones may often be bought for sixpence each. They are invaluable as adjuncts to a dinner-table, with a single blossom

daintily arranged for each guest, or as the out-works, so to speak, of a central pot that is stationary on a dining-room table.

Charming combinations resembling a tranquil lake edged with moss and flowers, can be arranged with the help of a piece of looking-glass. These artificial lakes are chiefly useful in dining-table decoration; but we have seen them occasionally elsewhere, and remember one in particular, arranged on a sort of console table in an old-fashioned drawing-room, the effect of which was most exquisite. Perhaps really suitable spots for this kind of ornamentation are rare; but now and then such an apparent surface of water may give an *idea* of coolness which is very refreshing, and which, as every doctor understands, helps to produce the actual physical feeling.

Umbrella-Holders.—It sounds odd to class umbrella-holders amongst *bric-à-brac*, but it may fairly be done now that people use such a variety of enamelled and painted earthenware cylinders for the



Fig. 4.—HUNG POCKETS.

purpose. Even drain-pipes are often set on end, painted with large flowers, and look remarkably well in the small hall or entrance lobby peculiar to so many villas, where it is a decided convenience to have something that takes up but little room, costs a very small sum of money, and yet is useful and ornamental into the bargain. This is the only kind of hall furniture that seems capable of being improvised at moderate expense; and the drain-pipe is much more useful if stood in a large brick saucer or seed-pail, which will also bear a little decorative painting. These things are best painted in oil colours; china painting would be too risky, troublesome, and expensive.

Hungarian Glass.—A vast quantity of Hungarian glass of pretty workmanship and dainty colouring has come into England of late, and no one who can afford to spend a sovereign on *bric-à-brac* can do better than choose among a large assortment such as can be found at a fancy shop, or at many stationers', who seem to deal in it rather than the ordinary glass shops. The prices may be said broadly to vary from 6d. to 7s. 6d., and of course there are more expensive items, but 7s. 6d. touches the point of very elegant and artistic specimens.

Somerset and Devonshire Pottery.—Among the pretty bits of artistic earthenware that have come to the front of late years is the Elton Ware, made on the Clevedon estate, for ever memorable on account of its connection with Tennyson's "In Memoriam," where

"Twice a day the Severn fills,
The salt sea-water passes by,
And hushes half the babbling Wye,
And makes a silence in the hills."

Then Devonshire is so rich in pottery-making clays that almost every workman who contrives to set up a little kiln and throw a few pots, comes across some new combination of colouring. Many specimens of this kind may be seen from time to time at Messrs. Howell and James's, as one of the partners in that firm, Mr. Willey, is a Devonshire man, and takes the greatest interest in these small potteries, and gives them all the encouragement in his power, which is not a little.

Carrara Ware.—Messrs. Doulton and Co., the well-known potters of Lambeth, in addition to the ware that bears their name (the Lambeth Faience and Impasto), have lately introduced a new decorative ware differing in many salient points from their former productions. Believing that the most enduring and imperishable of pottery materials will in the end commend themselves, they have again

turned attention to producing a highly vitreous body, and this new ware is the final result of much careful and prolonged experiment. The dense material of which it is formed is covered with a slightly translucent crystalline enamel, resembling "Carrara Marble." Unlike the usual attempts to imitate an egg-shell glaze, often produced on the surface of common pottery by repeated firings, the enamel is incorporated with the surface of the form by the same intense heat which vitrifies the body itself—an effect and process that have not hitherto been employed in decorative pottery. The material thus produced, to which the distinctive title of Carrara Ware has been given, has a surface such as must satisfy the most critical decorator—delicate and pleasing to the touch, soft and vellum-like in appearance, nevertheless intensely hard and enduring in its texture, being fully equal in this respect to the Doulton stoneware hitherto associated with the Lambeth Art Potteries, though of course entirely different in its character and method of manufacture. A large part of the decoration on Carrara Ware is executed in the plastic state, in this way utilising the varied talents of Messrs. Doulton's staff of modellers and designers—many of whom are ladies—who have in other and different styles produced works of art which have attracted most favourable criticisms from the art-world.

Irish China.—A kind of inexpensive china much in use of late years, is the Irish or iridescent china, which really comes from Belleek. It is extremely pretty, and some of the designers have been explorers in the same fields of Nature as Palissy, who always saw the beauty of snails and creeping things. The Emerald Isle, always verdant and always damp, has afforded them ample scope.

But we cannot attempt to describe in detail all the varieties of china and pottery. Every year brings out some new styles and patterns, or revives old ones, to please all tastes. Some of these productions are essentially modern, others of the Sèvres class, others of the majolica school; many are reproductions from the Renaissance, many classic (with other charming combinations of classic forms with modern colours), others imitations of Japanese or Oriental work. Even such material as plain terra-cotta daily assumes new forms, though we think terra-cotta statuary is rather tending to go out of fashion. Large Continental workshops vie with those of Worcestershire and Staffordshire in supplying all possible forms of beauty, at all prices from 6d. to sixty guineas; and all must find customers somewhere, though what becomes of all the imitation pug-dogs and monkeys to be seen in some of the shops, is a standing puzzle.

Clocks.—Timepieces are of many kinds, most of the gilt and enamelled ones, or those decorated with little plaques of painted porcelain, intended for the drawing-room, coming from Paris. Alabaster has gone out of favour for clock-cases, probably because it gets discoloured with age. Black marble seems almost sacred to dining-room, library, or study, and very nice ones are to be bought for from £6 to £10. The best plan, of course, is to go to a good shop where a large selection is kept, for it is almost impossible to go largely into description. Most of these clocks are French or Swiss; and if diligently and regularly wound up, they will keep very good time, though it is necessary to be acquainted with the habitual delinquencies of some, and to make allowance for them. Some get too fast, and some too slow; while many stop whenever they are moved for dusting, &c. It is the fashion to abuse the time-keeping powers of these clocks; but when all is said and done, intelligent treatment goes far to make them dependable.

The pretty little cuckoo clocks in fancy wooden cases are inexpensive, and peculiarly suitable for small houses in the country; and the larger cuckoos, fit for a hall, are really most in keeping with a country house. Very nice hall-clocks with deep striking tone have been made for some years, and the more expensive ones have little chimes of musical bells; but it is very unwise to put them in a small house, as the sound seems to pervade the whole of it, and becomes a nuisance even to neighbours when the house is semi-detached or in a terrace. Where the hall is large and lofty, and the sound does not reverberate, it is charming; and people who are wakeful often say that a clock that can be heard is like companionship in the night. For downright use in bedroom or sitting-room, or for carrying about from one room to another, there is nothing so compact or so cheap as the little American clock, in a brass or plated case, which usually has an alarum attached to it, and costs from 5s. to 12s. 6d.

Statuary.—This was never so extensively made, of all kinds, as now. Plain white Parian of good quality is wonderfully cheap, but its use depends entirely on taste; in some houses there is not a single figure, while other people like to have plenty of it. Parian or alabaster statuettes are rarely placed on mantelpieces now, and look much better on brackets made of dark wood or covered with crimson plush, which contrasts with the pure white of the figure. Corners are good places for white statuettes, or one may be placed on a narrow strip of wall between two windows, or the centre of the end wall of a long room is a good place. Quite a dark crimson plush generally looks better for the bracket supporting a Parian figure in the latter situation.

The beautiful tinted statuary, both of the Sèvres and more modern schools, has a much larger range of adaptation. Many of the figures are well adapted for mantelpieces, especially in a room of bright aspect; in other situations their effect is sometimes spoilt by the use of red plush, which is often quite unsuitable. Generally, in fact, some shade of blue or purple suits this class of figure much better, where a special bracket or stand has to be employed.

Decorative pottery, statuary, and similar articles of *bric-à-brac*, have so very much to do with the adornment of all modern houses, that persons furnishing would do well to take a walk through one or two of the more extensive show-rooms devoted to this class of goods, before making any extensive purchases for a new room. One gets a far better notion in this way of what is to be had, than when buying an odd vase here and another there; and one also may get *ideas* of things to be looked for. It is rather provoking, a month or two after buying a couple of vases to fill some particular niche in a room, to find that things might have been bought for the same money or less, which would have looked ever so much better in that particular place. For these and other reasons, an hour or two spent at a few of the warehouses devoted to decorative pottery, on the plea of some small purchase, will be well bestowed.

WHERE AND HOW TO SAVE.

It is not at all unlikely that if any number of house-keepers have followed the advice already given, and taken a little pains to ascertain exactly what their pecuniary position is, the unsatisfactory result for many of them will be the disheartening discovery that they are living on more than they possess, and consequently are sinking deeper and deeper into debt. This is shown by the fact that the items of their expenses when added together amount

to a larger sum than the items of their income, and thus the balance of their account is on the wrong side. The result specified is all the more to be deplored, because what these people have to aim at is not merely that income should equal outlay, but rather that income should overlap outlay very thoroughly and completely, so that there may be opportunity for saving and thrift. Here only is safety, and until the point indicated can be attained,

there is little prospect that those housekeepers will be able to congratulate themselves on having thoroughly managed their income.

Under these circumstances, the duty which has immediately to be faced is that of cutting down expenditure, so that the balance may be turned over to the other side of the account. This cutting-down process is a very dreary business; when long continued, it becomes very monotonous and depressing, and it too often takes the heart out of people who have to grapple with it. It is on record that there was once a thrifty lady, who when speaking to a friend enthusiastically of her brother said, "Thomas is like me; he enjoys economy." If this description were true, it might certainly have been concluded that the said Thomas was an uncommon individual; there are not many like him. Nor does the ordinarily constituted mortal feel attracted to Thomas by this account of him. The individual who can enjoy economy must be so very unusual that he will be lacking in sympathy with his fellows, and we instinctively shrink from him. Economy, regarded as saving and sparing, is a very common duty; it has to be practised by tens and thousands who have no choice of anything else; but it is undoubtedly a discipline and a trial, and it is only candid and honest to acknowledge that it is disagreeable. Yet it has to be dealt with: for if neglected, disaster and ruin will follow, and all hope of success will be destroyed.

This being so, we come at once face to face with the question, "Where and how may a saving be best effected in the management of the income?" We have, we will suppose, made up our minds that our expenses must be cut down. We cannot immediately add to our income, and therefore we must write off some of our wants. "Those who have few wants are rich," says the proverb. Riches in the sense of abundance of means seem to be impossible for us for the time, therefore we must be content if we can secure this other sort of riches. Yet in resolving to "do without," and to adopt methods of thrift, there is a danger that we may give up what is necessary for health, for comfort, for enjoyment, and for real welfare. We wish, therefore, to think the matter out, in order that we may keep what is more desirable, while discarding what is less desirable. Hundreds of thousands of householders before us must have been placed in similar circumstances to those we now occupy. How did they proceed? What were the lessons they gained from experience? These lessons have been recorded from time to time. Let us see if we cannot recollect them in detail.

Trifles.—For one thing, we must resolutely resolve that we will *not* spend money in trifles. "Trifles

make up the sum of human life;" they certainly add very considerably to the sum of household expenses. Yet the peculiarity about them is, that the people who most indulge in them are the most unconscious of the fact. "Avoid spending money in trifles;" of course," says the embarrassed householder, "that is what everyone says; yet why repeat the advice to me? I never buy trifles; I have something else to do with my money." Yet more likely than not the very next time this individual goes to market a small purchase will be made which benefits no one, and which runs away with one of those pennies that must be put together before the pounds can be saved.

It is a characteristic of unthrifty people that they readily yield to the temptation to buy trifles. It is said that workers among the poor, who try to get parents to save beforehand in order that their children may have a fortnight in the country, almost invariably find that the people who declare they are too poor to save, and that they cannot provide the eighteenpence or two shillings which are to constitute their contribution towards the treat, are the identical individuals who send off their children supplied with cheap sweets and shabby odds and ends of finery. The travelling costermongers and sweetstuff shops in poor neighbourhoods, are supported almost exclusively by people who lay out pennies and half-pennies upon rubbish, yet who say they cannot afford to buy good food. As it is with the very poor, so it is with householders higher in the social scale. The unthrifty, the unmethodical, and the weak, let money dribble between their fingers: the capable, managing, economical persons do not part with money unless they get money's worth in exchange.

Experts in economy have always been impressed with the importance of trifles. Thus Miss Barnett says: "Trifles and knickknacks are the most costly and the most useless things that one can buy, and those who practise economy must get out of the habit of purchasing them. No one with a limited income can afford the constant drain upon the purse kept up by the habit of buying trifles. Many persons seem unable to go out without going into a shop, or to pass a well-arranged window without buying some of its contents; and though they spend in this way more than their whole dress costs them, they have nothing to show for it at the end of the year but an empty exchequer."

Seeing, therefore, that the habit of buying trifles is so harmful, it is necessary that the householder who is resolved to save should resolutely determine not to indulge the same. Yet, as already stated, when the habit exists, the possessor is generally unconscious of it! Its presence may, however, be

quickly discovered, and its power broken, if the following rules are observed :—

Keep strict account of every farthing that is spent. The importance of this duty will be spoken of later.

Pay ready money for everything; on no account let small purchases be put down to be paid for at some future time. Dr. Johnson once said, "Small debts are like small shot; they rattle on every side, and can scarcely be escaped without a wound; great debts are like cannon—of loud noise, but little danger. You must therefore be enabled to discharge petty debts, that you may have leisure with security to struggle with the rest." "Do not accustom yourself," wrote the doctor to Boswell, "to consider debt only an inconvenience; you will find it a calamity. Let it be your first care not to be in any man's debt. Whatever you have, spend less. Frugality is not only the basis of quiet, but of beneficence."

Speaking on the same subject, Dr. Smiles said, "A man knows what his actual position is if he pays his way as he goes. He can keep within his means, and so apportion his expenditure as to reserve a fund of savings against a time of need. He is always balanced up; and if he buys nothing but what he pays for in cash, he cannot fail to be on the credit side of his household accounts at the year's end. But once let him commence the practice of running up bills—one at the tailor's, another at the dressmaker's and milliner's, another at the butcher's, another at the grocer's, and so on—and he never knows how he stands. He is deceived into debt; the road is made smooth and pleasant for him; things flow into the house for which he does not seem to pay; but they are all set down against him, and at the year's end, when the bills come in, he is ready to lift up his hands in dismay. Then he finds that the sweet of the honey will not repay him for the smart of the sting."

"To pay ready money," said Mr. Emerson once, "is a great check on the imagination;" and this is a chief reason why to pay ready money should be the rule with the provident householder. If we pay at once for what we buy, we realise at once the price which has to be paid for it, because we note that our purse contains so much less than it did before; but if we simply carry off the article purchased, without having any diminution of cash in hand, we feel for the moment as if we had got it for nothing, and the bill, when it is presented for payment, comes upon us as an unpleasant surprise. Moreover, when bills are permitted, small errors are apt to pass unrectified, which errors would have been marked at once if ready money had been paid.

To buy trifles which we cannot afford, and then take credit for them, is really a dishonesty.

Deliberation.—Another rule to be followed is never to buy anything in a hurry; but carefully to consider every purchase before making it, and to make a written memorandum of the quantity to be purchased, and the price to be paid. "Haste is a great waste." Householders who buy in haste, generally buy a trifle too much, or pay a trifle overmuch, or buy what they do not exactly want, and any one of these mistakes is an extravagance.

A very sure way of delivering ourselves from the habit of buying in haste, is to adopt the simple expedient of *leaving the purse at home*. Indeed, it may be said that only by such simple means is it possible for any one to cure himself of the habit of spending money on trifles!

Wholesale and Retail.—Having overcome the habit of spending money on trifles, and of buying hastily, the next thing to be done in order to save money—at any rate, for large householders—is to buy what must be bought, wholesale or in quantities. This will seem to be dangerous doctrine to householders who believe only in the power of going without; yet it is one of the secrets of wise spending. One of the hardest fetters which binds down the man who cannot manage his income, is that he has to pay the dearest price for everything which he eats or wears, simply because he cannot watch his opportunity, and take advantage of the market as other men do. As poor Becky Sharp said, "It would be easy to be virtuous on five thousand a year;" so the embarrassed householder might say, "It would be easy to be economical if I had a comfortable income;" and the remark would be quite true. It is easy for people who have got a little beforehand with the world to spend what they have wisely, simply because they can pick and choose, spend when the occasion is favourable, and spare when the occasion is unfavourable. One of the chief advantages which the householder gains who becomes master of his own income, is that he is not compelled to buy from hand to mouth. Yet this happy position is for the majority only to be reached gradually, and the way to arrive at it is to look ahead, and to save by making purchases beforehand.

The very poor, who buy coal by the hundred-weight or the sack, pay much more for coal than do householders who can afford to lay in a store of coal at the end of summer for winter use; those who buy eggs for so much each during the winter, pay more than do those who lay in a store of eggs when eggs are cheap, and pack them in dry salt or lime. These are only typical instances of articles which it is costly to buy in small quantities; there are many other things which it is cheaper to buy in

quantities than in driblets. Thus, in country districts, and also in towns where there is a large market, it is often possible to save by buying half a sheep or a quarter of beef at a time in winter, and then hanging part of the meat in a cool cellar, to be used as wanted. In cold weather meat improves with keeping, and no one who understands what meat ought to be, would consent to use it freshly killed. If meat thus bought is cheaper by the penny or the halfpenny per pound, these pennies and halfpennies, often multiplied, mount up to a considerable sum by the end of a year.

Apples bought by the barrel; potatoes by the sack, butter by the keg, oranges by the box, beans, dried peas, and similar articles by the bag, and soap by the hundredweight, are much cheaper than when bought from day to day as required; and the householder who understands how to choose, and how to buy, may save pounds in the year, and yet economise more successfully, while providing more liberally than does the individual whose one idea of economy is only to do without.

Check Consumption.—The method of buying in quantities is, however, an extravagance, instead of an economy, if housekeepers are not sufficiently experienced and managing to keep a strict check over consumption. This is really one of the chief difficulties connected with housekeeping; and it is astonishing what different ideas people have concerning it. That consumption must be guarded and measured if waste is to be prevented, is a fact which every housekeeper will see at once to be reasonable; for if food-supplies are to be open to all without let or hindrance, or any note being taken, they will simply seem to melt away, or, as *Punch's* Scotchman expressed it, the housekeeper will only need raise her head, and "bang will go saxpence." There are many householders who possess the needful cash in hand, but who fear to buy in the cheapest way—that is, in quantities—simply because they do not feel equal to the task of keeping consumption within due bounds. If they could solve this problem, their anxieties would largely disappear.

There are two ways of checking consumption in economically managed households. One is for the housekeeper to keep all provisions, utensils, and stores under lock and key, and to give them out by weight and measure as they are needed day by day. This method is exact without doubt; and when locks are strong, and bolts good, and where housekeepers are possessed of never-failing energy and determination, it answers very well in preventing the articles which are locked up from being used unnecessarily. Yet it is very questionable if any real saving is ever

effected by it at the end of a period of time, such as six months or a year; and it is by periods that savings ought to be measured. It leads to endless worry and annoyance; it causes unceasing friction between employers and employed; and the best servants seldom do their best where it is the rule. The best servants work most willingly, most intelligently, and most thoroughly in households where they feel that they are trusted, and that a liberal spirit is the guide of affairs; they "settle well" in these households, and thus save the endless annoyance and expense which is associated with changing servants. In households liberally but not extravagantly ordered, servants usually give liberal services without any of the calculating measure for measure which leads to so much disaster and loss. It is because the lock-and-key method is the sign of the measure-for-measure management that it cannot be regarded as a success. Servants who are wasteful, and who are not careful to guard their employers' interests, can waste with ounces just as readily as they can with pounds; while even if the ounces can be preserved, there are a hundred ways in which the wasteful disposition can display itself, and which affect the household expenditure, though they may be distinct from the larder.

The second way of checking consumption is that of doing it by means of the bills; the housekeeper calculating how much ought to be spent, and being satisfied if a certain limit is observed. By this method all friction may be avoided; a pleasant liberality makes itself felt, and yet there is no possibility of excess without discovery. The housekeeper who adopts this plan must of course take trouble to find out how much it is reasonable should be spent per week or per month in the particular household over which she presides. This calculation may be drawn up from an allowance table, which gives so much per week of certain supplies to each member of the household; or it may be drawn up from a calculation based on the number of persons to be provided for, giving so much a week per head for each. There is, of course, a difficulty in the way of a general calculation which has always to be faced; it arises from the difference in the age, habits, tastes, and numbers of the persons concerned. This difference makes it necessary that every housekeeper should draw up her own estimate. Thus, some people like meat two or three times a day, and do not care for puddings or sweets. How is it possible to supply their needs from an estimate drawn up for people who want meat only once a day, and who have a liking for all sorts of expensive trifles? A small family is, comparatively speaking, more expensive to provide for than a large family; a grown-up family is more expensive than a family where there

are young children and infants; men are more expensive to feed than women. The number of meals taken per day is another item which causes variety. In some households two substantial meals a day are deemed sufficient; others will have a heavy breakfast, a substantial dinner, a "comfortable" tea, and hot supper; others will have a succession of meals all day long, through the members of the family coming in separately at all hours. A family with these habits is a great expense.

Weekly Allowances.—All these details make variety, and render calculation difficult, and yet it may be possible to furnish hints taken from an average allowance, and which may assist the householder to form her own estimate. Thus, it is fairly safe to say that in a family of moderate means, where wise liberality without extravagance and without parsimony is the rule, the following supplies would be abundantly sufficient for people who use them "one with another." If each individual lived alone, larger supplies would be required:—

For each person per week—

Tea	3 oz.
Sugar (loaf sugar $\frac{1}{4}$ lb., moist ditto $\frac{1}{4}$ lb.)	$\frac{1}{2}$ lb.
Butter	$\frac{1}{2}$ lb.
Milk (including cream) (adults)	$3\frac{1}{2}$ pints
„ (young children)	7 quarts
Meat (men)	7 lbs.
„ (women)	$5\frac{1}{2}$ lbs.
Eggs	10

(The amount of meat is exclusive of bacon, dried fish, &c., for breakfast, but inclusive of soup-meat and of fat for frying and for pastry.)

The allowance for bread and flour, vegetables, fruits (fresh and dried), and other items, can scarcely be laid down, the demand for them is so very variable. When coffee and cocoa are used, however, a smaller quantity of tea would be needed; and it ought to be remembered that unlimited employment of either tea or coffee is very harmful to health.

The quantity of alcoholic drinks allowed per head is also very variable. In large establishments, where several servants are kept, it is not unusual to set down one quart per day for men, and one pint per day for women.

When the housekeeper finds it inconvenient to check expenditure by calculating the supplies, she may arrive at the same result more quickly and more easily by allowing so much per week per head, and resting content if the amount set aside is not exceeded. This is really a most excellent plan, because it saves so much worry. Besides, it gives latitude for the different members of the family to follow their individual tastes. It has again and again been found that in households where the servants dine in the middle of the day, while the family dine late, an

economy may be effected by letting the cook or a trusted servant cater for the kitchen meals, placing a limit only on the number of pounds of meat to be used. But in almost all cases it is necessary to allow the same scale of expense for servants as for the family. Householders who think to place servants on a lower scale of expense will generally find themselves disappointed.

The amount per head per week to be allowed for the various members of the household will, of course, vary with the style of living, the means of the householder, and the age of the individuals concerned. Children who live chiefly on milk will be fed for a comparatively small sum, although, if they require many changes of raiment, their washing-bills may be heavy. Grown-up persons, on the other hand, must have a certain amount of food-substance or their health will suffer. There never can be any saving made by trying to do without necessary nourishment. The way to save is to prevent waste, and to adopt economical methods; but to do without what is meet, leads to greater loss in the end. Nature revenges herself when she is outraged by being denied what is necessary, and her revenges generally take the form of serious disaster.

It is not possible, therefore, to lay down any general rule as to how much ought to be allowed per head for each member of the household. That is a calculation which each individual housekeeper must make to suit her own case; the only point to be insisted on is that she herself must have a thoroughly clear idea on the subject. Taking one thing with another, we may say that on the whole food-supplies are at the present time very cheap, good, and abundant. Some time ago meat threatened to be dear, but the introduction of New Zealand meat, and the possibility of bringing meat from distant lands to our own, has brought down its price. The treasures of every land are also laid at our feet; the use of gas and oil in cookery has supplied us with cheap fuel. Dwellers in towns, therefore, have everything made easy for them; it is persons who live in country places, and householders who live far away from shops and markets, who have the most difficulty in managing; but even these have resources unknown to dwellers in towns, in the produce of their gardens and fields. To save, therefore, what we need most of all is to understand how to make the most of what we have.

But though it may be taken for granted that it is not possible to lay down any general rule of expenditure, there are still certain standards of living, by studying which we can get to know what others regard as a reasonable outlay. One of these is the amount of board-wages paid to servants in order that they may keep themselves during the absence of the

family. Not many years ago servants used to consider that they were fairly well treated if they had 8s. per week for living. Later, the sum rose to 10s. per week; later still, to 12s. and 14s. per week. At the present time, in modest thrifty households it has once more declined to 10s. per week, although in luxurious households servants still receive 12s. and upwards per week. These sums supply us with a sort of guide, because when servants pay for themselves, they seldom waste, seeing that they want to save out of their wages; although if they pay for themselves out of a sum allowed by their employer, they seldom starve. For a grown-up household of limited means, where meat is eaten every day, where individuals have healthy hearty appetites, and where all the inmates dine at home, 10s. per week per head is a very moderate allowance. Whatever company is kept under these circumstances would have to be regarded as an extra.

Of course there are numberless households where means are not considered abundant, but where strict and close economy is not the rule, where an allowance like this would be regarded as ridiculous. Indeed, the difficulty associated with mentioning amounts at all is, that those who spend more will pronounce the estimate impossible, and those who spend less will pronounce it extravagance.

Authorities as to household expenditure differ exceedingly. Thus, a lady of wide experience and good common-sense, named Mrs. Henry Reeve, who published some years ago a very excellent book called "*Cookery and Housekeeping*," expressed the opinion that 15s. a week per head all round, servants and infants included, is what housekeeping expenses should come to per week in a cathedral town for a modest household where children are numerous and means small; although when a handsome table is kept, and there is neither stint nor excess, one pound per head per week may be accepted as a fair expenditure. In these averages visitors were not included. It is not likely that there are many households "where children are numerous, and means small," who could afford to allow 15s. per head per week.

On the other side, a most capable and experienced authority, Mrs. Barnett, of Whitechapel, after making most elaborate calculations concerning food, has arrived at the opinion that it is impossible even with "economy, knowledge, strength, and time" to obtain merely "dull, keep-me-alive sort of food," without any pleasant changes or refreshing appetisers, for less than 1d. or 1½d. per meal for each person. To obtain this meal for this sum pre-supposes favourable opportunities for marketing, a certain knowledge of cooking, and an acquaintance with the dietetic properties of food, which at present few possess, while for the most part the people who have to provide

food have no time, little knowledge, and only the remnants of strength.

Mrs. Barnett, moreover, declares that the real reason why so many in these days are not robust and strong, is that they have not sufficient wholesome food. She says we ought to calculate that a man requires 20 oz. of solid food per day, of which 20 oz., 4 oz. should be "nitrogenous," or the sort that is obtained from meat, fish, milk, peas, beans, eggs, cheese, and similar foods. The woman should eat 15 oz. of food per day, 3 oz. of which should be nitrogenous, though if she were doing much hard work she would probably need another ounce per day of the flesh-repairing foods. For the children, whose ages may vary from four to thirteen, it would be as well to estimate that they would each require 10 oz. of food, 2 oz. of which would be nitrogenous; and this estimate is under-stated rather than over-stated, because, as those who have had experience of children know, a growing lad of eleven or twelve will often eat more than his mother.

From all this it follows that every housekeeper must make her own calculation. She must find out what she can afford, and draw up her estimate accordingly; make up her mind thoroughly as to what it is reasonable and right she should spend; and when it has come to a question of going without, she must endeavour to go without what is less desirable in order that she may retain what is more desirable, whilst amongst the things that are more desirable should be unquestionably placed a sufficiency of good wholesome food. She may be quite sure that in the long run unthrift will go without far more than thrift.

Very often it happens, that when a housekeeper has taken pains to arrive at a correct knowledge of what she can afford to spend, the first discovery she makes is that it is necessary she should radically reduce her expenditure, and not merely keep a check on consumption; and she begins to cast about to discover how this may be most effectually done. Experience has proved again and again, that there are four ways in which reduction of household expenditure can most easily be made. The first is by lessening the number of servants employed in the household; the second is by discontinuing the use of beer; the third is by washing at home; and the fourth by making it a rule to use less butcher's meat, seeing that butcher's meat is one of the most serious sources of expense which the householder has to meet. We will take these methods of saving one by one.

Diminution of Servants.—There is no doubt that the pecuniary embarrassment which exists in a great many English households, would be over-

come at once if only housekeepers could arrange to do with fewer servants. There is no country in the world where a larger number of servants are kept for household work than in England; yet this multiplication of hired assistance does not lead to the work being better done; indeed, it too often leads to idleness, and that mischievous behaviour which is the rule when idleness is rampant. Of course when a number of servants are kept for the sake of ostentation, or because the style of living seems to demand the presence of a staff of domestics, extravagance and idleness will be expected. But there are many housekeepers who are not influenced by ostentatious motives, who yet think that it is impossible to dispense with a certain number of servants, even when their wages and their maintenance lead to anxiety. If such housekeepers would boldly take the bull by the horns, and see whether by rearranging the work of the household, by giving up needless forms, and by taking a personal share in the lighter details of household work, they could send one or more of their servants away, they might reduce their expenditure at a stroke, and be very much happier into the bargain. The cost of servants is not paid when the amount of their wage is paid. There is the cost of their maintenance to be defrayed also; and in the ordering of the household, there is the amount of work they *make* to be considered, as well as the work they do. Every additional servant in a house makes one more person to cook and provide for, one more person to wash dishes and clothes for, one more person to use the family goods, one more temper to be conciliated. To have more servants than are absolutely needed is no strength to a household, but rather a source of weakness; and, therefore, the wisest thing which a housekeeper can do who wishes to lessen expenditure, is to lessen the staff of domestics.

Mistresses of households and mothers of families might do a great deal to lessen the need for domestics, if they would train their children from earliest infancy to wait on themselves, and also to tidy their belongings as they go along. Children thus trained are much happier for being independent; and the saving of labour effected in a household every member of which waits on himself in small things, cannot be calculated.

The employment of labour-saving appliances also does much to lessen the need of a large staff of domestics. All the "resources of civilisation" in these days tend to lessen labour, and intelligent householders are eager to avail themselves of these. But in any case, excepting for display, it is a mistake to have in a house a larger number of servants than are needed to do the work of the house, with the idea that thus the work will be

better done. Servants work best when they are fully employed, so that they have to exercise their capacity in order that they may accomplish their tasks, though not so much occupied that they have to strain every nerve to get through. To keep too many servants is as injurious to the well-being of the household as to keep too few is a hardship; while from the point of view of economy, a multiplicity of servants is a great extravagance.

But while being careful to avoid the employment of an unnecessarily large staff of helpers, the householder should not forget that, if they can be had, it is an economy to keep efficient servants. It is a greater saving to pay a good wage to a person who understands how to work, than it is to pay a low wage to an untrained worker. There are many servants who are most costly to their employers, not through wilful extravagance, but through ignorance. "Knowing how" not only saves labour, but it saves money; while the domestic who does not know how to make the most of things, to utilise scraps, to preserve from wear and tear, and to prevent injury, throws away pounds in a year.

Discontinuance of Alcohol.—There is no greater cause of expense in a household than the arrangement to supply beer for those who care to have it. The expense of beer, and of alcoholic drinks generally, is one which grows almost without note being taken of it, and this growth is most difficult to check. Opinions differ as to whether or not healthy persons are ever any better for having beer or alcohol in any form; and it is certain that many are much better without it. Apart altogether, however, from the consideration of whether or not alcohol is agreeable or beneficial, there is no doubt that alcoholic drinks are very costly, and householders who want to save, would do well to think seriously if it would not be possible to dispense with alcohol altogether in their households. If they could accomplish this feat, they would save almost without knowing where or how.

Even if the master of the house and the gentlemen of the family are unwilling to accept this limitation, it would be an economy to discontinue to provide beer for kitchen use. In these days it is becoming quite usual for the rule to be laid down that "no beer is allowed" in the kitchen; and housekeepers have realised so fully the advantages of the plan, that they regularly give higher wages on account thereof. Respectable servants are quite satisfied if they have higher wages instead of beer, for they are usually frugal-minded persons, and glad to have the opportunity of putting aside a little money. When beer is provided, it not infrequently finds its way to hangers-on of the household, with whose attendance

the housekeeper would very gladly dispense if she could. Therefore, for more reasons than one, it is advisable to give up keeping beer for kitchen use. The practice of doing away with beer is so common in these days, that householders who wish to adopt this plan of saving would only be doing as others do. Of course it is easier to commence a custom of this kind when new servants are engaged, than it is to deprive old servants of an accustomed beverage. The method of procedure must, therefore, be a matter of arrangement; but of the fact itself there is no doubt; there is no more effectual way of saving than that of, not reducing, but doing away with beer and alcoholic drinks; and the business is much more easily accomplished than one would think, where householders will determinedly abolish beer entirely, instead of simply trying to limit its consumption.

Householders who get into money difficulties, and who make up their minds to reduce their expenses, almost invariably, and very wisely, make a beginning by attacking this one article of expense. If accustomed to take beer, however, they try to regulate its consumption, and keep strict watch and ward over the supply. They can have no idea how much easier it would be, and how much trouble it would save all round, if they could discontinue it altogether. The difficulty which arises from absolute abstinence lasts only a day or two; and the wish for anything of the sort grows weaker with every day that passes. But in moderate consumption there is constant temptation to exceed prescribed limits, and therefore moderate indulgence causes constant struggle. We have all heard of the poor drunkard who resolved to reform, and who put a glass of spirits on the table before him, and said he would fight his enemy facing him. The unfortunate man would have been much safer if he had turned his enemy out of the house. So it is when this particular enemy attacks our pockets. If we turn it out of the house, we need not fear it.

It is worth noting, that householders who resolve to dispense with alcohol entirely would be much more likely to make their experiment a success if they would not under-estimate its power. Those who content themselves with saying that beer is not necessary, and that it may very well be given up, do not realise that, after all, beer gives a certain staying-power; it "supplies a want," as the advertisers say; and if it is taken away, its place must be supplied, or it will be sadly missed. It is very hard for persons who have been accustomed to take beer regularly, to be limited to cold water; they feel the need of a substitute for the stimulant, and this substitute it is wise to supply. If it is not supplied, the probability is that they will return to the alcohol with

greater zest than ever. Housekeepers should remember that there is scarcely a domestic beverage that can be named, which is not cheaper than alcohol in the long run; and therefore, if they dispense with the one, they can afford to supply the other. It requires a little consideration before the best substitute can be chosen; but the choice of beverages in these days is very varied. Coffee, cocoa, milk, lime-juice, ginger-beer, lemonade, fruit syrups of all kinds, aerated waters, toast-water, and barley-water, are all approved, and all in their place are good. As a substitute for alcohol, however, there is nothing that in these days is more highly recommended than hot water. Of course, individuals who are accustomed to alcohol have a great contempt for hot water; they receive the mention of it with derision: yet those who have formed the habit of drinking it, speak most highly of it; and it is strongly recommended by many medical men. It assuages thirst better than, perhaps, any drink which can be taken; it aids digestion; and in time it becomes quite agreeable and acceptable. Taken as a "night-cap," before retiring to rest, it quiets the nerves and promotes sleep; and those who miss alcohol especially in this respect, as many do at first, will do well to make trial of hot water as a substitute.

Washing at Home.—The next item in which a saving can be effectively made by management in the cost of living, is in the laundry department. If householders who are accustomed to put their washing out, can make judicious arrangements to have everything washed at home, they may reduce their laundry bills by at least one-half. Usually this is a saving worth making.

Some years ago, washing at home was the rule in middle-class households, and washing-day was accepted as a necessary evil. Now a day's washing at home is the exception—at any rate, in towns of the South of England. North-country folks are in this respect more thrifty than Southerners; although even Northerners are more self-indulgent than they once were. Undoubtedly it is a great convenience to put washing out. To collect the dirty articles every week, to pack them up, and to see them no more until they come back clean and perfectly got up, is a great luxury; and it makes life very much easier. Yet it is a very costly luxury also, and, as is the case with many other luxuries, we do not know at first sight how much we pay for it. Linen put out to wash does not last nearly as long as does linen washed carefully and intelligently at home. Every housekeeper of experience knows this, and there is no gainsaying the fact. Professional laundresses will use washing-powders for cleansing purposes, and these preparations cause linen to fall to pieces in

a most deplorable manner. Housekeepers, therefore, who put their linen out to wash, must make up their minds to purchase new garments very frequently.

Notwithstanding all that can be said in its favour, however, washing at home is, excepting in households where there is special provision for laundry-work, so very troublesome, and it is so great a disturbance of the household peace, that there is no wonder housekeepers are afraid of it. Especially is it an annoyance when outside help has to be hired for it, because the ordinary helpers of the household are not equal to it. Occasional helpers are apt to bring trouble with them; they unsettle the servants; they introduce extravagant notions; they are never satisfied. There is no denying that an industrious clever woman may in one day wash as many clothes as it would cost £1 to put out; and yet the housekeeper who has to consider the soap and firing she must provide, the food that will be consumed, the annoyances that must be endured, the demoralising influences that will be exercised, is quite justified in pausing before she arranges for the employment of such an individual.

It would be well if housekeepers who are in difficulties on this point would give a little attention to the new way of washing with paraffin, which will be described in an article on "Washing at Home." This new way is much scorned by housekeepers who believe only in old-fashioned methods, but it is being adopted by an increasingly large number of persons; and it is said that in the North of England it has almost revolutionised laundry-work. Of these who have tried it, some speak of it with great enthusiasm, others say it is an entire failure; but it is certainly worth the notice of housekeepers who are entirely bewildered as to how they shall solve this one domestic problem.

Even when new methods are disregarded, it is well worth while for the housekeeper who finds it necessary to reduce expenses, to study seriously the subject of the washing-bills. To do only a part of the washing at home makes a saving. If small articles—such as stockings, pocket-handkerchiefs, under-flannels, vests, d'oyleys, &c.—are dealt with at home, they can often be managed very easily, yet their absence from the laundry list reduces it very substantially. Sometimes, also, the daughters of the household will undertake to wash their own laces or stockings; and this is a help to the housekeeper, for in a difficulty of this kind every little helps. There is no doubt, also, that when rational under-clothing is worn, the saving in the family-wash is very considerable; for one of the chief advantages associated with the use of rational under-clothing, is the economy it effects in washing. If everything else must be put out, a

very acceptable saving might be made by washing kitchen towels and dusters at home. Articles of this kind become formidable when they are allowed to accumulate; if they are washed frequently, they seem to be scarcely any trouble; and there are numbers of women who keep a good supply of kitchen cloths without letting them enter the general list from year's end to year's end. Sometimes these women form a habit of washing every night the kitchen cloths and dusters which have been used during the day; sometimes, when the oven is in constant use, they accustom themselves to soak the kitchen cloths, then slightly soap them, put them into an earthenware jar with a little ammonia or a small piece of soda, and leave them in the oven all night. In the morning they need only to be rinsed, and they are clean. But, whatever method they adopt, they keep down the supply of dirty cloths, and by doing this they not only economise, but help to keep the atmosphere of the kitchen sweet and pure.

Lessening the Amount of Butcher's Meat.

—Meat is the most expensive kind of food there is, yet to eat much meat is not wholesome. If we were to eat less meat and more vegetable diet, we should benefit in health as well as in pocket. Thus Mrs. Buckton, in her excellent little book called "Health in the House," says: "People who eat a great quantity of meat daily, often suffer from most dreadful complaints—the stone and gout. If they get a slight cut or wound, it will not heal quickly. The Americans in the United States, rich and poor, eat as much butcher's meat as they like. No English people suffer so much from stomach complaints, nor are more unhealthy. It is said that the working people in Ireland, who live chiefly on vegetables (the potato), are not afflicted with gout. The French rarely suffer from disorder of the stomach. They eat at least a third less meat than we do, twice as much bread, and a great quantity of vegetables and fruit. I am not a vegetarian, but I believe in living, as the French do, on a great variety of the most nourishing, simple, and well-cooked foods; and that butcher's meat is not the only food by which we can make flesh, and strengthen our nerves and muscles. Fortunately, the most nourishing foods are the cheapest." Mrs. Buckton then goes on to say that the vegetable flesh-formers are flour, oatmeal, peas, barley, *Revalenta Arabica* (ground lentils), macaroni, and semolina—she might have added haricot beans—and that "1 lb. of either flour, oatmeal, ground rice, or ground peas, will give a man as much strength as 3 lbs. of lean beef, or 3 lbs. of veal, or 3 lbs. of ham boiled, or nine bottles of Bass's pale ale, or six bottles of Guinness's stout at 10d. per bottle." Sir

Henry Thompson, also, the celebrated surgeon, in his essay on "Food and Feeding," says that the work of the German armies during the winter of 1870—1 was supported on vegetables combined with fat, "an instructive lesson for us in England at the present moment." "Their food consisted of a simple pea-soup mixed with a certain proportion of bacon or lard, constituting in very small compass a perfect food, especially suitable for supporting muscular expenditure and exposure to cold. Better than any flesh, the cost was not more than half that of ordinary meat."

Unfortunately for housekeepers, although food of the kind mentioned is known to be cheap, the taste for it seldom occurs in English households. It would exist, however, if it were cultivated, and if a little pains were bestowed upon making the food appetising. A change from a liberal supply of butcher's meat to more simple food would have to be made gradually; but once satisfactorily accomplished, it would be certain to be enjoyed, and the saving in the household expenses would be enormous. Yet even if it is felt that it would be impossible for this taste to be developed, housekeepers might still lessen their butcher's bills by choosing other than the best joints of meat. Sirloins of beef and loins of mutton are very excellent without doubt, but their price is more than they are worth as compared with other parts of the animals. This is partly because in these days no one will condescend to take the cheaper joints. Solid joints containing little bone and fat, such as the rump, the silver-side, the leg-of-mutton piece, the brisket, the shin of beef, and the leg of mutton, are more

profitable than joints with much bone, skin, and fat; while there are parts of the animal, such as the roll of the muscle of the leg of beef, the breast of mutton, ox-cheek, tripe, liver, trotters, &c., from which delicious dishes may be made if only they are carefully cooked. But in cases of this kind everything depends upon the cooking.

Buy only Good Things.—The last suggestion for saving expense which can be made is, that everything which is bought in the household should be good of its kind, and should be bought at a good shop. In a household there is nothing dearer than cheap things, and housekeepers who are constantly trying to get what is cheap, never have their hands out of their pockets. Those, on the contrary, who buy what is of value, get the worth of their money, and save more than they know. At the same time those who make their purchases at a good shop, and pay a fair price, will not only get a good article, but they will receive the exact weight which they expect. Shopkeepers who boast before everything else of cheapness, very often give short weight. Those who try to defraud their work-people by not paying proper wages, will try to defraud their customers also. It is true that inspectors go round to examine weights and measures, but when people have the will to be dishonest they can generally find a way. Housekeepers, therefore, who have been accustomed to make purchases "on the cheap," would do well to weigh their goods. In nine cases out of ten they will find they have paid for them more than they thought. In the long run we never make a real saving by trying to defraud others.

LIGHTING BY WINDOWS, CANDLES, AND LAMPS.

HUMAN beings require light, almost as much as they do warmth, and those who live in dark houses are seldom or never well. Given a house in a street facing the north, and it is invariably gloomy, whether the road be wide or narrow, and whether there are other houses opposite or not. A south aspect is invariably cheerful, and so is an east aspect; and doctors always prefer these for their patients, because they believe in the curative influence of sunshine. Even where there is no question of cure, but only of alleviating and cheering, sunshine makes a great deal of difference to invalids, and to all who are obliged to spend much of their time indoors. But though houses facing the east get the morning sun, those that look westwards get it in the afternoon and evening; and where the sitting-rooms have opposite aspects, there is always

a cool one in hot weather. Perhaps the ideal aspect for a house is to face S.S.E., as it then receives whatever sunshine there is to be had, though the sun does not pour in quite directly on either side, but goes, as it were, *round* the house, and gives its beneficent influence as long as it shines. Artists, however, seek for a studio with a north light; and this should always be borne in mind when any members of the family are seriously devoted to art as a profession or business.

Windows.—In early days the windows of dwelling-houses in this country were very small, probably from the difficulty of glazing or otherwise shutting out the weather; but in Tudor times they expanded into bays and long lattices, and not till the days of William and Mary were windows made long,

straight, and narrow—a fashion which was further curtailed during the Georgian era, when small and almost square sash-windows were almost universal.

The window-tax reduced the number of openings for light most unmercifully. Few, indeed, were the middle-class houses that had more than one in a room; and it was not at all unusual for small bedrooms and closets to borrow their light from other rooms instead of having windows of their own.

Traces of this old and foolish tax may still be seen in houses that are not old enough to be antique, yet cannot be called modern, where there are dummy windows, painted on the outside with frames like the real windows, and a space of black divided by white lines to represent panes of glass, and very frequently further embellished by a blind painted across the upper panes, and a dangling white cord and tassel in the middle.

During the last forty years, however, almost all houses have been built with either deep bays, or wide flat windows. Quite small six- and eight-roomed dwellings may be seen in every London suburb with bays on the lower storey, and sometimes continued above. This mode of building adds considerably to the size of the rooms. In the neighbourhood of towns they are mostly sash-windows divided into three, the centre being the widest, and very often the only one made to open; and they are brought down to within two or two and a half feet of the floor. The central sashes, however, are very heavy, especially when glazed with plate-glass, and the sash-lines are perpetually breaking; while the removal of the beading under which the cords work, and putting it back again, is generally done in so perfunctory a manner that the glass is not pressed as tightly as it ought to be, and rocks and rattles with every gust of wind. A great deal of air also finds its way through these chinks, and

consequently large windows of this kind are voted "draughty."

In the country such windows are usually of the French order—that is to say, they open down to the ground in the same way as doors, each half of the window being on hinges, and fastening in the middle. This is a very pleasant way of ingress and egress, whether the rooms open on to a balcony or verandah, or straight out into the garden. But from

French windows there is always a draught to the floor of the room, though this is avoided if a course of bricks is built all the way along before the window-frame is inserted. It makes a step over which the feet must be lifted in going in or out through the window, but it prevents the draught.

It is commonly said in seaside places on the southern coast, where French and casement windows are almost the rule, that nothing can keep the wet out when there is a strong southerly gale accompanied by rain; and it is really comical to go into good houses, and see an array of baths and pans, and old blankets, disposed in the window recesses to catch the water. It

is very usual in such places to use lead or waterproof paper on the sloping sides of these window recesses to keep the wet from penetrating the plaster, and to hang the ordinary room-paper over it.

A room with a western aspect, and a large window reaching to the ceiling, will, especially in an open situation, have quite half an hour longer daylight than one with any other aspect; and that is something to be thankful for in the dark months. A verandah, pretty though it may be, and delightful in very bright hot weather, obstructs the light and darkens the rooms round which it runs. If, however, the roof be entirely of rough glass, or if a few feet of clear glass are let in just over the windows, it makes an immense difference to the light.

A bay window, when unprotected by a balcony,

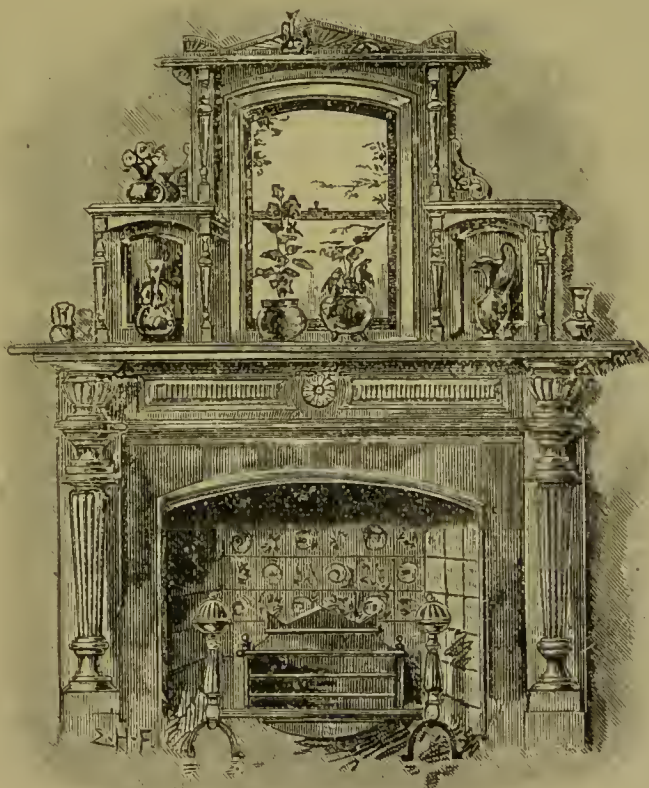


Fig. 1.—WINDOW OVER FIREPLACE.

receives the full force of the wind from three points of the compass, and is consequently not very well adapted for a bedroom. During a good many months of the year in our climate the rain, snow, and hail are driven against the glass on one side or the other, and light sleepers do not find the noise at all conducive to rest. In a sitting-room it is of less consequence.

A very delightful kind of window, and one frequently seen in Derbyshire, in the Isle of Wight, and in sundry places where ornamental villas are in demand, can only be had where the chimney is in the outside wall. This is an arched window over the fireplace, as at Fig. 1; and it can only be made by carrying the chimney to one side, immediately above the grate. Some who have tried it declare that chimneys so built are sure to be smoky; and others say exactly the opposite. But the great beauty of a window over the fireplace is that you can sit by the fire with book or work during the day, and have a good light. There is no ornament so nice in such a position as a good large maidenhair fern, or a couple of them. They take kindly to the situation, and generally do very well. A drawing-room built out from an old moated manor-house in a secluded part of the Isle of Wight has a splendid fireplace window, which in summer is kept filled with fine large seedling calceolarias, and a little later on with small-flowered pink begonias, followed by chrysanthemums with small pots of maidenhair just hiding the lower and naked part of the stems.

"Queen Anne" houses are literally full of windows—casements for the most part; and very bright they are, though in winter they certainly require substantial curtains. It used to be considered desirable and proper, whether the windows were large or small, to have the blinds down for at least a third of the distance from the top; and very pleasant is this plan to persons with weak sight, who cannot bear a glare of light. But for others whose eyes are strong, and who have a goodly portion of the world's work to do, a high light is preferable, and the half-drawn blinds produce a feeling of gloom and depression. Near-sighted people generally prefer a strong high light.

But speaking generally, let it never be forgotten that healthy life requires *plenty of light*. Without it we become pale and flabby, and vitality is lowered; and this is a heavy price to pay for a little economy. If a drawing-room is unoccupied all day, there is no reason why it should not be protected from strong sunlight, neither need unpleasant glare be tolerated; but the too customary drawing down of blinds in rooms which are in use, in order to "preserve" the carpet or anything else, is strongly to be deprecated.

Wherever work has to be done which requires constant use of the eyes, and especially if it be literary

work, in which the glare of white paper has to be considered, the table should be so arranged that the light comes from one side—preferably the left side—and not from the front of the worker. The reason can be seen in a moment from Fig. 2, which shows how the light from the window, *w*, falling on the paper, is reflected at a similar angle into the eyes of the worker at *A*. This is the reason of the glare, or shiny appearance, of the paper under such circumstances, and which in the long run is very injurious to the eyes.

Blinds.—So closely associated with windows are blinds, that this is the place to mention them. The ordinary Venetian blinds are not exactly things of the past, because the majority of houses are fitted with them; but they have come to be accounted in some quarters common and rather vulgar. It is perfectly true that they easily get out of order, and collect dust; but in very sunny situations they are invaluable, especially to housewives who are careful of their carpets; and fashion ought to be subservient to common-sense. Where it is desirable to keep a room dark and cool during the hottest part of the day, outside Venetians, which close like old-fashioned outside shutters, are extremely nice, and do not interfere with any kind of inside blind or decoration that may be preferred.

Sun-blinds of a very thick striped kind of holland, red or green and white, are nice, but look deplorable after a heavy shower or two; and they darken the rooms, though they protect paint and keep it from blistering.

The large "Queen Anne" windows often have small frilled curtains of art-muslin fitted to each division, on Mrs. Panton's plan (see p. 246, vol. i.), an arrangement which does not require the assistance of carpenter or upholsterer, but has the advantage of being managed by *materfamilias* and her daughters, as no fittings are needed.

Artificial Light.—But our windows admit light only as long as the sun gives it, and the hours of darkness in the course of the year equal those of light. Artificial light must be had; and the faster the world goes, the more of it is needed. The twilight hours, during which ladies used to sit and gossip round the fire, putting off ringing for lights as long as possible, are now too valuable to be thus ruthlessly wasted; and even the thriftiest of matrons sees that there is no end to be gained by knitting her husband's socks in the dark, as did that Norfolk lady whose economy was brought forward in the pulpit by the parson of her parish.

The ideal artificial light, to quote a modern writer, "should be clear, that objects may be vividly and

naturally depicted: pure, that it may not vitiate the atmosphere; cool, that it may not diffuse unhealthy warmth; steady, that it may not injure the eyesight; silent, that it may not interfere with reflection; harmless, that it may not damage persons or property; trustworthy, that it may dispense with the trouble and expense of duplication; simple, that it may be controlled by unskilled hands without detracting from its efficiency; and cheap, that it may be available to the masses, who are least able to counteract the noxious influences of unwholesome, or bear the cost of expensive, illumination."

That ideal light has scarcely yet been found, though perhaps we are within measurable distance of it. Light, however, we must have, and consequently it is necessary to make the best of whatever system is most conveniently within our reach.

Candles.—The time of candles (except by way of ornament) is over—at all events, in this country; though there will always be a certain amount of demand for them, especially for bedrooms. Some people dislike gas in sleeping-apartments; others who use lamps in a general way, have an objection to them as movable lights on account of the quickness with which the flame goes out, and the danger of some of them; and consequently the wax or composite candle remains in favour. As a matter of taste and luxury, there is no light so soft or so becoming as that of wax candles, but very few can afford to use them.

There must always be parts—in our colonies, for instance—where the population is too sparse and scattered for any idea of having gas and gas-works, where inflammable paraffin cannot be had on account of the difficulty and risk of carriage, and where candles must afford the main source of light, varied by a lamp or two when there is oil within reach. Under these circumstances every morsel of grease is carefully preserved, whether it be the extra fat from a sheep that is killed, or simply that which comes in the way of the day's cooking. For the latter, butter, if procurable, is too precious;

lard, unless pigs are kept, is unknown; and all these domestic purposes have to be arranged for by careful management. But what is over, and indeed what has been used for cooking, is all put together, re-melted, and used for making the family soap and candles. Dips are plaited lengths of wick which are dipped over and over again in melted fat, leaving each layer to cool and solidify before a second dipping. Then everyone has a set or several sets of tin moulds grouped together, which are dipped in cold water, a wick set in the centre of each, and the cylinder filled up with melted fat. These are literally mould candles. All that is over of the fat, and all the coarser kinds, are put together and treated

with a strong alkali, potash being the best, and this produces soap for household purposes. In some cases, a person comes round to collect the grease, and brings back so many candles and so much soap; but of course no one does this without making a profit; and the processes, when once understood, are so simple, and add so much to household comfort and convenience, that in these days of emigration every woman about to go abroad ought to be acquainted with them.

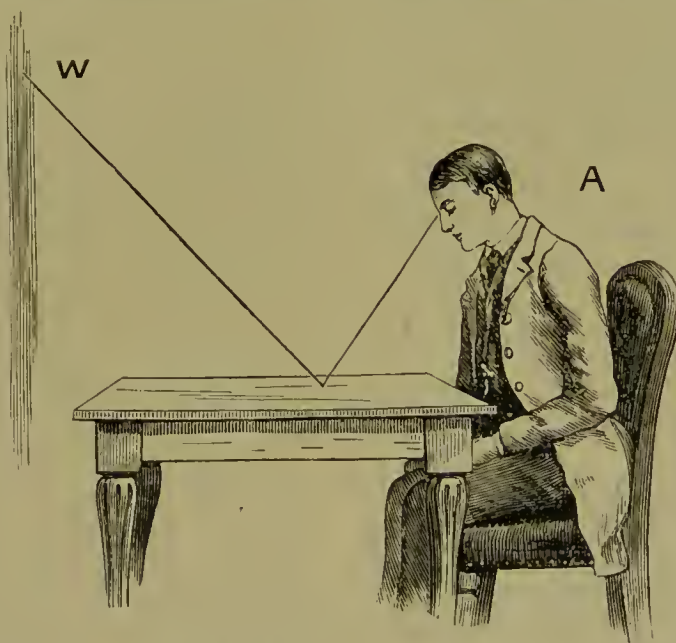


Fig. 2.—EVILS OF A FRONT LIGHT.

Rushlights are made in the same way as dips, but the wicks are peeled rushes, and they are burned in stamped-iron or wire-gauze cylinders, so that, in case of spluttering or falling over, there is no danger of setting fire to anything. For the benefit of the uninitiated we must add that it is better to make long rushlights than short ones; and when only required to burn four or five hours, that end is attained by sticking two pins at right angles right through tallow and wick in the middle, or any other ascertained point of the rushlight.

In England we chiefly use paraffin or composite candles and night-lights, and very excellent these are. A few of the old candle-lamps remain; and indeed there has lately been a movement to revive them. They are made with a spring at the bottom, which rises as the thick candle burns; and as they are fitted with suitable shades, and are managed as simply as a china bedroom candlestick, they have their votaries;

and are particularly valuable for hot climates, where all doors and windows are open, as the shade keeps the flame from being blown out by the draught. Some have a polished reflector besides; and these give a really good light for quiet reading or study, when the room at large has not to be lighted.

The great nuisance of flat candlesticks is that if not carried *quite* straight, the grease drops on dresses and carpets; but this is remedied by the small iron or bronze stands with glass shades, which give all the light and none of the drips. Unfortunately, these glass shades have a trick of getting broken, and some of them are expensive to replace. If the metal ring, which in one pattern of this kind fits into the socket, is preserved, fresh glasses can be fitted in; and the ordinary price for glass and fitting is 10d. This in a careless household becomes a decided tax. There is, however, a simpler pattern made, in which only a simple cylindrical shade has to be renewed.

A specially hard kind of candle is made for pianos, and should always be used, or the vibration of the instrument may cause the melted grease to drop upon the keys.

Night-lights are very desirable in case of sickness, or where there are young children, or anyone who dislikes sleeping without a light in the room; and in this country it is very easy to keep a stock of them. The colonial housekeeper, however, must make them for herself, or be prepared to do so in the intervals between her supplies of the ordinary articles of civilised consumption, which are so often caused by bad roads, floods, and, in some parts, by hostile tribes. The best fat for the purpose consists of the drippings and small ends of other candles; and it is very much improved if a little white wax is shaved small and melted with it. Make a fine cotton wick, and wax it, and cut it into the requisite lengths. Stand some tin rings on an old dish, and fill them with the melted fat; and when it begins to cool a little, but is still liquid, drop the wicks in straight through the middle. They will neither stick to the tin nor the earthenware, and will make very nice night-lights of the modern kind which are burned in glasses. Another plan is to preserve all the old pill-boxes of the household (the lower parts, not the lids), and fill the rounds thus obtained with the melted grease, with wicks in the centre, in just the same way. These must be burned, like Child's night-lights, in a saucer containing a little water, about an eighth of an inch in depth.

Candles, like soap, improve by being kept for a few months; and if the supply of wax candles treasured for choice occasions should happen to get soiled or discoloured, a clean piece of rag or flannel dipped in spirits of wine will restore their pristine whiteness.

Where candles are used habitually, it is imperative to have a stock of *save-alls*, so that the candle may be burned up to the very end, unless the house-mistress is very certain that she will be able to use up the remnants profitably in any other way. The best *save-alls* are short pieces of white marble or earthenware, with a spike at the upper end, on to which the piece of candle can be stuck. This does not look unsightly, and enables the candles to be thoroughly burnt out, though there will still remain a small collection of grease. It is better to use the small pieces with *save-alls* in the flat candlesticks. It is often said of a housekeeper, almost as a term of reproach, that she is the kind of person who "looks after candle-ends," but it is a proof of practical wisdom to gather up the remnants, even of candles. Waste is always wrong; and it is not right to give servants the opportunity of giving away or hoarding even such trifles as these. However generous a housekeeper may be, her servants will respect her all the more for knowing that she abhors waste, and will not permit it in her own little "woman's kingdom."

But useful as candles often are, it is just as well to remember that they are in principle examples of how *not* to do it, for they are so constructed as to secure the worst combustion, the most dirt, and the least light, for the amount of money expended.

Lamps.—Lamps have been used in almost all lands, and artists in metal in bygone ages have expended all their powers in making beautiful reservoirs for the oil, which, with a floating wick burning with much smoke and smell, was the principal method in use for illuminating houses, temples, and places of public assemblage. The Etruscan lamps were models of beauty in outer form; and many specimens of earthenware and porcelain lamps remain to show us the shapes in vogue among previous generations. But as sources of illumination these ancient lamps were simply atrocious. Curiously enough, the effect of a draught of air on combustion was not even guessed at, and was only discovered by accident in the year 1787. The story goes that two brothers of Swiss origin, named Argand, lived in Paris, and one of them devoted himself to the improvement of lamps and lighting for several years with very little success. He found out, however, that several small wicks "all in a row" burned far more brightly than one solid wick of the same size; and subsequently discovered that when the wicks or jets of light were arranged in a circle, a current of air was created in the centre, and the light became very much brighter. Still the *smoke* continued, and after endless experiments Argand was on the point of giving up

in despair, when, as the brothers sat watching the dull flame, a tin tube or cylinder with which the younger one was playing, dropped from his hand and rolled towards the other, who picked it up and abstractedly held it over the light. In an instant the flame rose clear and bright, and the smoke vanished. The happy Argand speedily constructed a lamp with metal chimney and circular burner, and patented it; but somehow or other his patent did not protect him, for the Parisian tinsmiths contested it, and under the existing laws claimed that they, and they alone, possessed the monopoly of lamp-making. Then came the French Revolution, and monopolies and patents were ruthlessly swept away, though Argand's discovery remained unforgetten, and on it all our modern lamps have been based.

The next point to be aimed at was the steadiness and continuance of the flame; and in the year 1800 a Frenchman named Careel made up his mind that the one thing needful to the attainment of this end was the maintenance of the oil at a given level. This was far more the case a century ago than it is now, because almost all the oil in use had a fishy origin, and was consequently so viscous that it resisted the force of capillary attraction. Careel invented some intricate machinery for the purpose of always keeping the oil within a given distance of the flame; but it was expensive, and very easily got out of order, though, with all these disadvantages, it maintained a certain amount of popularity for thirty years.

Moderator Lamps.—It was another Frenchman, named Franchot, who in 1830 introduced the well-known moderator lamp, the machinery of which has been technically described as a system of "forcing the oil up to a fixed level by means of a small piston acted on by a spiral spring, controlled by a pinion and ratchet." Vast numbers of these lamps were sold, and they maintained their popularity wherever gas was not used, down to the introduction of paraffin and the lamps specially adapted for burning it. A moderator would require winding up once or twice on a long winter evening; and if the master or mistress undertook the entire management of the lamp, it would probably remain in good order for a long while; but between carelessness and clumsy attempts at cleaning, servants had a wonderful knack of making it unserviceable. The great disadvantage of the moderator lamp is the running down of the spring, which causes collapse of the flame, destruction of the wick, and a most abominable smell of burnt oil.

Vegetable oils were soon found to be far better for burning than sperm and other fishy oils. Many kinds were tried, such as olive, cocoa-nut, and palm

oil, all of which at length gave way to colza or rape-seed oil, a very inexpensive and cleanly product, clear, colourless, and almost free from smell. It gives a bright clear light, and has the advantage of being non-explosive.

The moderator lamp has, however, most completely gone out of use in this country, except among people who make the best of what they have, rather than buy what is more convenient. It will, however, be probably used in tropical countries, where vegetable oils principally prevail, for a long time to come.

There are only three operations required in preparing the moderator lamp for use—filling the reservoir with oil, winding up the spring, and putting on the wick or cotton. If the latter are of inferior quality, they often smoke, and the best means of preventing this is to boil them in strong vinegar, and then thoroughly dry them; they burn very clearly after this operation. People who find themselves out of lamp-wicks, and at an insuperable distance from any means of buying them, will find that pieces of old white cotton stockings answer the purpose pretty well, especially if treated with vinegar in the manner described above.

The Queen's Reading Lamp, mounted on a pillar for table use, and adjustable for height, is a well-known simple form of oil-lamp. One of the best and simplest for colza oil somewhat resembles this, and is known as Silber's Wellington Lamp. This consists of a metal stand with a cylinder to hold the oil on one side, and a burner, shade, &c., on the other. The pipe which brings the oil from the cylinder through the stand to the wick-tube keeps the parts of the lamp together, and the shade protects the eyes from glare, and throws a soft light down on the book or paper. The flame can be protected against insects, and the lamp is then very suitable for a hot climate, while there is no machinery, as in the moderator form, to get out of order.

Paraffin Lamps.—Petroleum or paraffin has only been recognised and made popular use of during the last five or six and twenty years. Previously to that period, about 1850, a Mr. Young, of Glasgow, took out a patent for distilling oil from the shale, which, as every reader of Hugh Miller's works knows, is very abundant in Scotland; and it has also been distilled from peat. These processes were quite thrown into the shade, however, by the boring for petroleum in Pennsylvania, where it was found in such quantities, that in one form or another it is burned in a very large proportion of the houses of the world.

Experts think that the Pennsylvanian oil-wells are within measurable distance of being exhausted; but that is of little consequence, except to those who live

in that particular region, because the mineral oil has been found in so many other parts of the world. There are vast subterranean stores of it in Burmah, as well as at Baku on the Caspian Sea, in Galicia, and even, it is said, in England, where a petroleum belt 200 miles in length, and forty broad, with a depth of eighty feet, is known to exist. In fact, petroleum, like coal, probably underlies every part of the globe, though at different depths, some of which are workable and some are not.

This mineral oil is one of Nature's richest gifts to man, and all he has to do is to raise, purify, and transport it from the spot where it is found to the places where it is wanted. On the coast of the Black Sea, after being conveyed from Baku on the Caspian, it costs about one penny a gallon; in London the same oil is fivepence a gallon, and after undergoing much purification it is sold at tenpence, though in large quantities it is cheaper still. Petroleum consists of about equal quantities of carbon and hydrogen, and some kinds contain also sulphur, oxygen, and nitrogen; but these are among the impurities that have to be refined away.

The purer the oil, and the higher what is termed its "flashing-point," *the safer it is*. A very good test for kerosene is to pour a spoonful into a saucer, and try to light it with a match; if it flames up, reject it as unsafe; if it refuses to ignite, it is more or less fit for domestic use. The safe kinds burn *only* with a wick.

The great danger with petroleum, paraffin, or kerosene, in which latter form the mineral oil is now generally used, is from explosion, as the burner is, and must be in every lamp, very near the reservoir. If the ordinary common lamp is upset, the consequences are terrible. Wherever the oil runs, it burns, after being set on fire from the flame of the wick; water will not extinguish it—and, indeed, nothing will but sand or earth. The total of fatal accidents from the upsetting or explosion of common petroleum lamps is something awful, and must be put down partly to unsafe lamps, and partly to the use of oil the flashing-point of which is horribly dangerous.

Rules for Common Lamps.—The following rules were first published in 1886, when the public mind was much exercised on account of several deplorable lamp accidents, and a perfect scare set in; which has had the result of causing the majority of lamp-burners to take care that those about them understand better the management of the oil, and the mechanism of the lamps. Many people have had them printed, framed, and hung up in hall, kitchen, and passages:—

"Take care that the vessels you send to be filled with oil are clean, neither water nor dirt in them.

"Dry the wick before using, so as to get out any moisture; then dip the end to be lighted in the oil.

"See that the wick fits the wick-tube, not too tightly or too loosely.

"The wick should not be longer than to reach to the bottom of the oil-container. It would be well to change the wick once in two months. Bear in mind that the wick acts the part of a strainer.

"Once a week thoroughly clean the burner, and remove the burnt pieces of wick.

"Before lighting, remove the burnt part of the wick with the fingers; then turn down on a level with the wick-tube, and rub the finger across; this will give a uniformity to the wick, and is better than cutting.

"Turn up the wick slightly, light it, let it remain for two or three minutes, then turn up to the full power, as long as the flame remains white. When the edge of the flame is orange-colour, proper combustion is not taking place.

"If a lamp has been used for three or four hours, previously to lighting, fill. It is well to keep the lamp filled. Do not burn the lamp out until the oil is completely exhausted.

"The unpleasant smell generally noticed from lamps when first lighted is chiefly caused by the pieces of carbon or burnt wick inside the burner, or from oil spilt on the outside while filling. Take care to well wipe the lamp when filled.

"Turn down the wick gently; leave the small blue flickering flame, which will quickly die out. Never, under any circumstances, blow down the chimney. In the event of the oil taking fire at the burner, a sharp puff of the breath will frequently put it out. If this fails, then take a mat, or something of a similar substance that may be handy, and so smother out the flame."

There are a few other points connected with kerosene and any other descriptions of mineral oil that must be attended to for comfort as well as safety.

To avoid smell, take care never to spill the oil on the outside of the glass or metal receiver. In trimming a lamp, the wick need rarely, if ever, be cut; it is quite sufficient to rub it with a soft piece of rag till all burnt particles are gone. If turned down even with the wick-holder, this ensures its being quite even after rubbing. Never light the wick with a short match, which may possibly be dropped into the reservoir of oil of an old-fashioned lamp, with the direst results; but light it with a wax taper, such as is used for lighting gas.

No wick requires so little trimming as a round one. It is only necessary to rub over the blackened portion level with the tube that holds it, with the rag or piece of paper, and it is completely trimmed. The best way of cleansing the burners is every now and then to detach them from the lamp and boil in strong

soda-and-water, either in an old saucepan kept for that purpose, and no other, or in an old tin out of which corned mutton or preserved tomatoes have been taken. These last will stand down on the coals if necessary, and there is no fear of damaging them.

Among the advantages of kerosene are, that when properly managed, and *not spilt* either on the lamp or anything else, there are no unpleasant or unwholesome fumes from it; gilding, electro-plate, &c., remain untarnished, and flowers retain their freshness, where it is burned, just as well as where colza oil or candles are used. Spilling the oil may be quite prevented by the use of the "Silber" can, of which the curved portion of the spout contains two tubes. The upper one has an opening at the top of the interior of the can that serves for the entrance of air; while the lower one, which opens into the bottom of the can, is for the exit of oil. The can is filled by unscrewing the plug at the top, and this must then be screwed down again. The curved spout must be inserted about an inch into the reservoir of the lamp, and the filling proceeded with. When the oil in the reservoir rises to the level of the upper tube in the spout, it bars the admission of air, and no more oil can escape.

Safety Lamps.—The numerous accidents from common kerosene lamps have caused much attention to be devoted to the question of safety. This question is affected both by the kind of lamp and character of the oil used, the lighter oils being most dangerous; and finally, it is found that the construction of the lamp affects the kind of oil which can be burnt in it, so that heavy and safe oils can only be used in lamps of a certain class. Lamps can now be obtained which are perfectly safe.

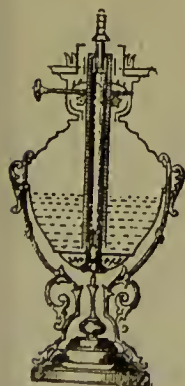


Fig. 3.

Messrs. Defries and Son have made the subject their special study, and have introduced not only a safety lamp, but "safety oil" to burn in it; and these produce not only a brilliant light combined with a pure atmosphere, but absolute safety, complete absence of smell, and great economy. The burners cannot possibly explode, even if upset, and whether the "safety oil" be used or not.

The construction of the Defries safety lamp is exceedingly simple, and the main principle is sufficiently shown in the small diagram (Fig. 3). The wick descends through a tube which passes to the bottom of the reservoir and is brazed into its top, so that if the reservoir be inverted the fluid cannot

run out; nor is there any possible communication between the flame and the vapour in the reservoir. The burner itself is of a kind now very usual in petroleum oil-lamps, the flame from a circular wick being spread by a button into a tulip form. Two sizes of burners are made for the safety lamps, No. 1 giving a light of 43·4 candle-power, and No. 2 giving a light of 61·5 candle-power. There is a cottage size of about 10 candle-power.

Mr. Boverton Redwood, F.C.S., F.I.C., who is the great authority on petroleum, being chemist to the Petroleum Association, gives the following results after carefully testing and examining both sizes of these lamps:—

	Lamp No. 1 Burner.	Lamp No. 2 Burner.	
Maximum illuminating power	42·4	61·5	Standard Candles.
Minimum ditto after 6 hours burning	39·7	57·4	" "
Average ditto during 6 hours	41·2	58·8	" "
Oil consumed per hour	1696 grs.	2450 grs.	

The following are the results of the tests applied by Mr. Redwood to the "safety oil":—

Specific gravity	·830
Flashing point	270° Fahr.
Fire test	308° Fahr.
Percentage distilling below 550° Fahr.	5·4

Oil of this character is quite as safe as the vegetable oils, such as colza; in one way even safer, because cotton waste or any other absorbent material when saturated with it is not liable to spontaneous combustion. It is entirely the structure of the lamp that enables oil of this character to be used; and though the "safety oil" is more expensive per gallon than ordinary kerosene, it produces the maximum of light for the minimum of outlay.

The Insurance Companies regard these lamps with great favour on account of their safety, and that speaks volumes for them. Of course they are to be had in every variety of form and material, more or less ornate—from the very plain and very cheap, up to the handsomest and most elaborate; but the burner is on the same principle in all. Fig. 4 represents one of the cheap and popular patterns of table lamps of the Defries safety pattern, which in plain polished brass, as shown, costs about 11s. 6d., including the shade, for a light of over 40 candle-power.

Messrs. Defries have lately introduced another form of their safety lamps, especially suitable for pendants, in which the reservoir is above the burner, which is fed by pipes, the flow being controlled by air. These lamps may be burnt for 30 to 60 hours without needing trimming or re-filling, and the light is much less obstructed *below* the lamp than when the reservoir occupies its usual position.

The principal Birmingham makers also now make

safety lamps, which are fast superseding the older single and duplex flat wicks, most of the safety lamps having circular wicks. The duplex lamps required great care in trimming to give the best results, and nearly all the safety arrangements, so far as we are

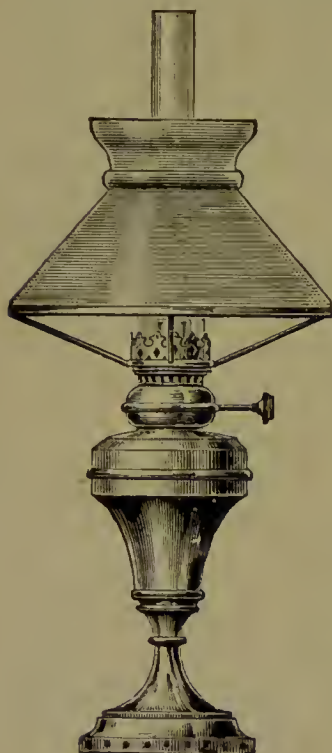


Fig. 4.

aware, depend upon a tube going to the bottom of the reservoir, which is easiest adapted to a circular wick. The well-known "Shaftesbury" lamp, however, has a flat wick, and there have been some attempts recently to introduce what are called "safety" duplex burners; but it should be pointed out that whilst some of these do appear greatly to minimise chances of explosion, this form of burner is in itself less adapted to the use of the *heavier oils*, which are the safer. The old duplex lamp would not burn kerosene heavier than about .820 specific gravity, and fails altogether with the Defries oil of .830; whereas it is found that the burners now becoming so general, giving a powerful circular or tulip flame of 40 candles and upwards, will burn much heavier oils—up to .850 or more. Now, these heavier oils are in themselves much safer and to be preferred to lighter kinds of kerosene; they are also infinitely safer to store in the house, as well as to burn; and hence it will be seen that the large circular wick is *in itself* to be preferred, for weighty reasons, and with the hope of gradually superseding light kerosenes by safer oils.

The development of the Russian petroleum industry has led to the appearance of a new safety lamp for burning that oil in the natural heavy form. It is made of metal, so as not to break, but does not become overheated. An air-chamber on the oil-reservoir allows the air to reach the flame in a warm state. No dangerous gas is formed in the oil-reservoir, and the light can be blown out without fear of accident. There is no smell or waste of oil by vaporisation; and by means of two levers the flame is extinguished in the event of the lamp falling. Moreover, the oil-reservoir is modelled on the principle of the unspilling ink-bottle;

hence there is less escape of oil than in ordinary lamps. The turning of an ignited wick downwards by an ignorant or careless person is kept from igniting the oil by a special contrivance, and the flame put out. The price of this lamp is very moderate.

The "Little Princess" lamps, so well known, are extremely pretty, and are fitted with patent burners that allow of their being blown out with perfect safety; and if upset, extinguish themselves at once. When tested photometrically, each of these lamps gives the light of six candles; and the quantity of oil consumed in nine hours is one-third of a pint, which costs one single halfpenny. The "Little Princesses" have a sort of stem with a spring to it, which enables them to fit into candlesticks, looking-glass or piano sconces, and brackets for wall-lights; and anyone who has old silver or plated candlesticks put on one side will be able to turn them to most ornamental advantage by putting an electroplated "Princess" into each; or if the candlesticks are brass, the lamps can be had with brass burners, rather cheaper—the former costing 3s. 9d., and the latter 2s. 6d., complete. The oil-reservoirs are made in ruby and rose-colour, opal, blue, or amber; and the shades are opal, but have pretty perforated paper shades to match the colour of the reservoir. It is difficult to say whether the pink or the amber are best; but a great deal must depend on the colouring of the room in which they are used. The registered number of these "Princess" lamps is 5,313, and it is stamped on the collar of every one. If judiciously placed in wall-sockets, they give quite enough light for halls, passages, and staircases, and have a charming effect.

Other lamps which give more or less safety are being brought out almost every day, and further improvements are being constantly made. It is difficult to say at present which is the best; but almost every one described as such by a house of any repute is *tolerably* safe; and every prudent householder should at least choose some one or other of the "safety" patterns, and insist on having the safety part of the arrangement explained to him; for the retail lamp-shops of the common type are *not* to be depended upon as regards their statements on this head.

Some discussion has taken place about the comparative safety of china or glass, and metal, for the reservoirs. The metal gets hot somewhat sooner with common burners; but on the other side is the terrible risk in case of a lamp being knocked over; and it must be borne in mind that the most perfect safety arrangement is inoperative in case of a breakage. Moreover, the best safety burners do not appreciably heat the reservoir, which in all these lamps is made much deeper in proportion than the

old glass burners, as shown in Figs. 3 and 4. This also preserves the fluid from becoming heated. Altogether, it must be said that the makers of best repute, as regards the safety of their lamps, have all adopted metal reservoirs. It is much to be wished that the use or sale of all lamps not fairly fulfilling safety conditions should be forbidden by Act of Parliament; and also that no oil should be allowed to be sold to the public with a flashing-point below a much higher figure than that at present allowed.

The Ross System.—Yet another mode of utilising paraffin or kerosene is known as the Ross system, and is the invention of a Dublin gentleman of that name. He stores the oil in a tank, which may be placed out of doors or in, above the level of the highest burner, or buried in the ground; and he distributes it through small tubes, one of which, an eighth of an inch in diameter, is sufficient to supply three burners. On each floor a small regulator is placed, which, by means of a float-valve, governs the flow of oil, so that each burner is furnished automatically with just enough to maintain the oil at a fixed distance from the flame. To each regulator an overflow-pipe should be attached, to conduct any surplus of oil to a cistern in the cellar.

The burner used for the Ross light is a barrel about six inches long and one and a half in diameter. This can be attached to a bracket or chandelier, or fitted to a cross-bar or standard light as used for gas. Inside the barrel is a cylindrical chamber for receiving the oil and the wick; and between them is an annular space for air, which is supplied by small pipes, such as are used for gas, and received from a compressor under a pressure of two inches of water. In places where water is laid on, hydraulic bellows, such as are used for organ-blowing, answer the purpose very well. A disused gasometer may be filled by a hydraulic blower, and adapted for a general supply. The special "Ross" compressor is simply a common gas-meter driven backwards by a weight; and when wound up, it gives a sure and steady supply. When the air reaches the burner, it is injected from a small jet beneath the oil-chamber, which induces a current of outer air, that, combining with the forced supply, rushes up round the oil-chamber, and by means of a cap placed over the burner is forced against the flame. This flame is thus beaten out so thin that every particle of carbon is brought into contact with the air, and the result is a clear steady fish-tail flame, diffusing a soft white light quite free from smoke or smell, in consequence of the perfect combustion obtainable under this system.

Each light is independent of the others, and may

be turned off at will. The oil never rises beyond a given point, whether the lamp burns or not, and the air may be allowed to escape, as it costs nothing and helps to ventilate the room. The light is turned off, by simply lowering the wick, quite as easily as gas. The wicks are "indestructible," and need no trimming or attention for months together; and there are no glasses to break, as the air-draught dispenses with any need for a chimney.

Professor Redwood has carefully examined this method of lighting, and speaks very highly of it as regards safety, efficiency, economy, and convenience. The first cost, however, is against the spread of it.

Decorative Illuminations.—Very pretty little lights for decorative purposes have been introduced during the last few years in the shape of "Fairy Lights," with their pink, blue, or white shades, or those made of the Burmese mixture, from pale amber shaded off to a deep terra-cotta red. Placed on brackets round a room they have a charming effect; and so they have among masses of flowers and greenery. Two or three arranged among flowers on a long table are delightful for a twilight meal; they do not give too much light, but just light enough to be pleasant; and yet it is, perhaps, not dark enough to shut out the daylight, and regularly light the lamps.

For illuminating a garden or conservatory, there is nothing, for suspending overhead, like the Chinese and Japanese lanterns that have become so cheap; and for edging paths or outlining beds, rows of small coloured glasses, half filled with oil, and with a floating wick in each, are all that can be desired. The newest, cleanest, and perhaps the cheapest way of producing the latter effect, where gas is laid on, is to carry a gas-pipe round each bed, alcove, arbour, or whatever place is being decorated, this pipe being furnished with small jets at regular intervals, over each of which is placed a brightly coloured glass. There is very little labour in lighting or extinguishing them, as the jets are not furnished with separate taps, but each piece of pipe has either one or two, by means of which all can be extinguished together, or very speedily lit by a taper-stick or any similar contrivance.

For momentary additional illuminations, short lengths of magnesium ribbon and coloured fires are the usual means, especially in a garden, where there are shrubs and corners sufficient to conceal the persons who set light to them. Magnesium ribbon can be lighted and burnt as easily as a slip of paper, and produces at the cost of one penny a brief illumination rivalling that of the electric arc in brilliancy. The ribbon costs 6d. per yard, and six inches of it will burn for nearly half a minute.

HOME-MADE SUITS FOR BOYS.

THE difficulty with girls' outer garments is that their fashion is always changing; but with small boys no difficulty of this sort exists. Boys' "sailor suits" or boys' "knickerbockers," as they are often called, have been worn for years, and with slight variations which can easily be managed by mothers who are clever with needle and thread, they probably will be worn for many years to come. Fortunate is the mother who can make these garments at home, and especially so if she is possessed of a sewing machine; for with a very small expenditure of time and strength she may accomplish wonders. She will not need to attempt very neat small stitching, which would be a trial to the eyes and a strain upon the nerves. All that she will want is a good well-fitting pattern, and a clear idea of how to cut out and join together her material; and thus equipped, she may keep her boys neatly and comfortably clad for a sum so moderate that it would astonish even herself if she were to think about it.

In these days it is very usual for mothers to buy ready-made suits for their boys. When people can afford to go to a good shop, and pay a good price, these suits are a great convenience. They are cut out and made by experts; they are of good material; they fit well; they look stylish and smart; and they wear well. There is no denying that they are much superior to the home-made suits. Before clothes can be made thus perfectly the maker must serve an apprenticeship to the business, and this a mother, who has to be careful about many things, cannot do.

The unfortunate part of the business is that these high-class ready-made suits are so very excellent, that mothers who cannot afford to pay a good price are tempted, having seen them, to get cheap imitations thereof. These imitations are marvellously cheap without doubt, but they are a delusion for all that. They are made of shoddy—that is, of cloth which consists of old worn material torn up and re-woven; and they have no durability in them. They may look well for a day or two; but the first time their small owner is caught in a shower, or falls in the street, and has to have his clothes brushed, or climbs a wall and comes down rather more quickly than he intended, all their freshness and beauty are gone. The stitches give way, the lustre disappears, holes are found where they were least expected; yet the thrifty mother cannot mend the disappointing garments, for she has no comfortable patches "of the same," which can be laid in place so neatly that only an experienced eye would see that they were there. She must either purchase another suit, or let the boy go shabby. Whichever course she pursues,

however, we may expect that if she is at all inclined to be unreasonable she will say, "How tiresome boys are! how many clothes they get through! There is no keeping boys tidy!" Indeed, the boys are not as much to blame as at first appears; they are the victims of circumstances. If the mother had made their suits at home, of a thoroughly good serviceable fabric; made them from a good pattern; finished them neatly, and sewn them well, the boys would have looked tidy for a long time. The clothes might have been washed, cleaned, mended, and patched, but they would have looked respectable through everything; and in nine cases out of ten they would be passed from one brother to another, because it was found that they resisted hard wear so well that the boy grew out of the clothes before the clothes themselves wore out.

When about to make boys' suits, it is very desirable to have a good pattern. Such a pattern can be bought of any pattern-dealers, such as Messrs. Butterick, of Regent Street, London. For the benefit,



Fig. 1.



Fig. 2.

however, of mothers who cannot get one of these patterns, the following suggestions are given; and it is hoped that they will be found useful.

A boy's sailor suit, it should be understood, consists of the blouse and the knickerbockers. Sometimes the blouse is lined, sometimes it is without lining—according to choice. An inner waistcoat is often added. The patterns here given are intended for a boy of six or seven, but they can easily be enlarged or lessened to suit the size. A suit of this kind is so simple, and so easily made, that the most inexperienced worker who would bestow a little care upon it need not fear failure.

Blouse.—The blouse is cut in eight pieces: one back, two fronts, four sleeve-pieces, and one collar.

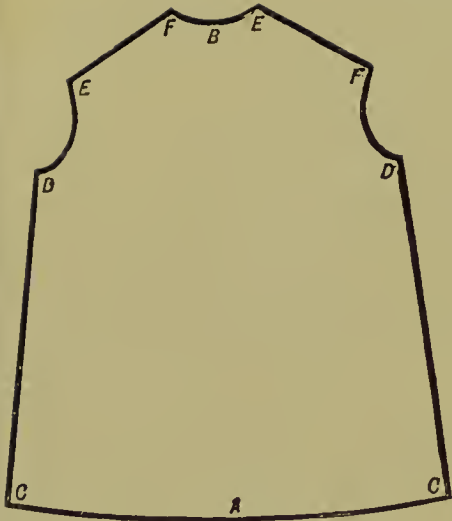


Fig. 3.

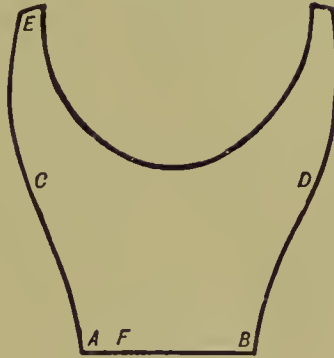


Fig. 5.

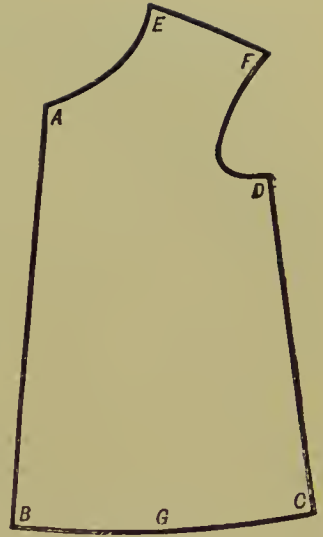


Fig. 4.

Figs. 1 and 2 are the sleeves, Fig. 1 being the under-part of the sleeve. Fig. 3 is the back; Fig. 4, one of the fronts; Fig. 5, the collar. In Fig. 1 the under part of the sleeve is hollowed, to make it lie flat under the arm. The back is in one piece. The fronts (A to B) are joined, or buttoned up the front, as preferred. The blouse is loose at the neck, so that if joined at the front it can be slipped over the head. The seams c to d are joined; so also are the shoulder-seams e to f. When putting in the sleeve, it is important that the shorter of the two seams thereof should be well in front of the side-seam of the blouse. The centre of the collar must be at the exact centre of the back. The collar meets at the front with a bow. A broad hem at the bottom, with a loose running string of elastic, completes the blouse. The elastic

need not be at all tight, but it keeps the blouse in position, while the folds of the material fall over it.

For a blouse of this sort for a boy of about seven years of age, the measurements would be—

Back.

A to B, 20 inches.
C to C, 18 inches.
C to D, 14½ inches.

D to F, 15 inches.
E to F, 5 inches.

Front.

A to B, 17½ inches.
C to D, 14 inches.

E to G, 21½ inches.
E to F, 5 inches.

Collar.

A to B, 6 inches.
C to D, 11 inches.

E to F, 14 inches.

Sleeves.

A to B, 18 inches.
C to D, 15 inches.
A to C (Fig. 1), 4½ inches.
A to C (Fig. 2), 6 inches.

D to B (Fig. 1), 5½ inches.
D to B (Fig. 2), 8 inches.
E to F (Fig. 2), 17 inches.



Fig. 6.—FRONT.



Fig. 7.—BACK.

The measurements here given are intended to furnish an idea of the proportions of the garment when finished, half an inch being allowed in every case for turnings-in.

If the pattern were taken in paper, it could easily be either enlarged or lessened to suit special cases, provided always that these proportions were maintained. The sleeve at the wrist might be trimmed

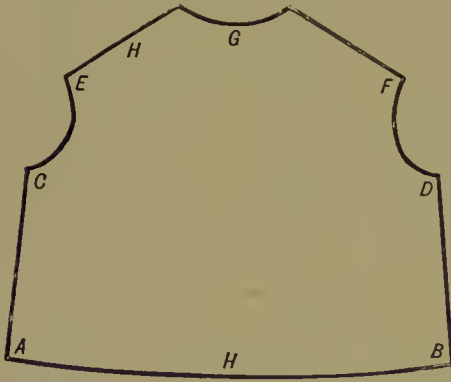


Fig. 8.

either with braid, or with a straight piece of material laid on. Figs. 6 and 7 show the blouse complete, as drawn by an artist from a garment actually made at home, and not taken from a tailor's pattern book.

For winter wear a blouse of this sort would be warmer if lined. In this case the patterns given should be laid under the cloth quite flat, and basted well before the seams are stitched; otherwise they will not set properly. It is well to remember, however, that inexperienced workers find it much more difficult to make a lined blouse than to make an unlined one; while, apart from the difficulty, many mothers prefer to have a loose lining, instead of a lining which forms part of the blouse, because it can be readily washed, and frequently changed. A loose lining is also advantageous because the drawers can be buttoned to it; and thus braces, which are not desirable for very small boys, can be dispensed with. If braces are used, the loose lining will not be needed—at least, for fastening the drawers.

A boy's sailor blouse may be made high or low in the neck, to show much or little of the chemisette as preferred. In the illustrations it is cut to show very little, and the chemisette or under-front, when so cut, is not really necessary. If, however, the mother would prefer to have the neck more open, she would need only to hollow the neck part of Fig. 4 a little more, approaching the pattern of the front of the waistcoat in Fig. 9, and this would produce the desired alteration.

The **Inner Waistcoat** is made in three pieces, one back and two fronts. Fig. 8 is the back;

Fig. 9, one of the two fronts; and Fig. 10 shows the waistcoat complete. The measurements are—

Back.

A to B (across), $16\frac{1}{2}$ inches.	E to F	12 inches.
C to D	15 inches.	G to H (depth), 13 inches.

Front.

A to B (across), 11 inches.	E to F (depth), $14\frac{1}{2}$ inches.
C to D	$9\frac{1}{2}$ inches.

As thus cut the pieces can, it should be understood, if preferred, be fastened into the jacket as a lining.

The **Front or Chemisette**, it will be seen, is a very simple affair; it is shown in Fig. 11. It is made double, and is fastened by buttons on one shoulder, as at A and B. The corners CD are supplied with small loops of tape, while the corresponding corners at the back are furnished with strings. By means of the loops and the strings the front is kept down securely.

The Knickers.—To make the knickers, each leg is cut separately in two pieces—Fig. 12 being the front piece, and Fig. 13 the back piece. This back piece, it will be noted, is larger and deeper than the front piece, because it has to hang a little to fit the figure. Fig. 14 shows the garment complete.

If the pieces are laid flat on the table the measurements will be—

Front.

A to B, $19\frac{1}{2}$ inches.	D to E (the broadest part),
A to C, $6\frac{1}{2}$ inches.	9 inches.
	B to F, 7 inches.

Back.

A to B, $19\frac{1}{2}$ inches.	G to H (the broadest part),
C to D, 22 inches.	$10\frac{1}{2}$ inches.
E to F, $20\frac{1}{2}$ inches.	C to B, 7 inches.



Fig. 10.

If the knickers are to be lined, a good strong twill will be an appropriate material for the purpose.

The linings should be cut like the knickers, and they should be tacked in securely before being stitched. Join the legs together at the outside seams, but leave the sides open at the top about five inches. Stitch also the inner seam of the leg up to E.

The front part of the knickers is more difficult to make than any other part of the suit. It is best to make this portion after tacking in the lining, and before sewing up the seams, because by this means it can be arranged more neatly. Very good turnings-in must be allowed, and the button-holes should be made to lap well over the buttons. The opening at the front on both sides should have a facing of the material, and these facings should be lined with brown holland if the suit is of a light colour; with strong black linen if it is of a dark colour. To make the front: stitch an inch and a half or more,

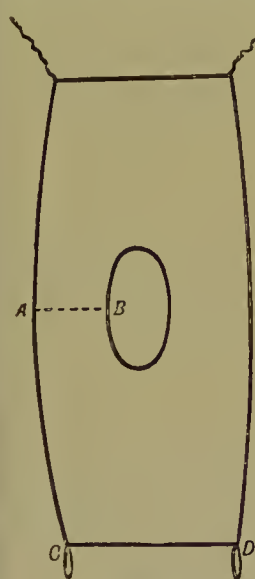


Fig. 11.

according to the height of the boy, above E, turn back the lining to make this join, then run it together on the wrong side, and afterwards tack it again to the legs thus joined; cut a facing made of a straight strip of the material taken selvage-way, and about an inch and a quarter wide at the waist end, a little narrower at the lower end; line it, and put it on the right side of the front from E to F, letting in the edge of the leg between the false piece and the lining (this strip is for the buttons); turn the left side of the

front under the right, put a double strip of the material under it, and make button-holes there. The easiest way of managing this part of the garment is to examine a pair of tailor-made trousers, and imitate the method.

The whole of the back of these knickers is put into one band, which would be made of a straight strip of the material two inches deep and sixteen inches wide. The fronts are put into two bands, each one being seven inches wide. These bands would be lined. The strips of material which contain the buttons and button-holes would go under the band on one side, and over it on the other. The front is fastened with small buttons and button-holes; there is a button-hole each side of the band where the side opening occurs, and these should be so arranged that one side will overlap the other in fastening. The front also overlaps a little where it buttons.

There is a button-hole at each side of the front, and button-holes at the back, which button-holes are



Fig. 12.



Fig. 13.

made to meet buttons fixed on the waistcoat. If, however, braces are worn, the bands are furnished with buttons. When braces are worn, also, both bands and waistcoat are frequently dispensed with, and the top of the knickers is simply bound, and furnished with buttons. This method has been adopted in the illustration.

Some time ago the legs of boys' knickerbockers were furnished with elastic, to make them fit tightly to the leg. In these days it is more usual to leave them loose at the knee, and to hem them only. Or they may be made the same as men's knickerbockers often are worn, especially by cyclists. The knickers on this system are made several inches longer, so as to reach half-way from the knee to the ankle. At the bottom there is either a binding of strong elastic, or more commonly the bottom is finished with a slit opening, and a narrow strap and buckle of the same material. One or the other fastens just below the knee, where the leg narrows above the calf, and prevents the band from slipping down; and the extra portion of the knickers draws down outside the band in a fold, being neatly arranged when the knickers are put on. The chief advantage of this method is, that the



Fig. 14.

top of the stocking can be rolled down outwards in a small roll, and then if the strap is buckled just below this roll, the stockings are kept up comfortably without garters, while the knees are loose and easy. But although very suitable for grown people, it is not desirable that children should wear anything constricting the lower limbs, which is apt to produce varicose veins in later life; and it is better by far for the stockings to be kept up by other means, and for the knickers to be only buckled just sufficiently tight to keep the buckled band from slipping down.

It was stated two pages back that in these measurements half an inch had been allowed for turnings-in. Mothers, however, would do well to note that if pockets are to be allowed, a much deeper turning will be needed at the part where the pockets occur, as well as at the front. The pocket should be made of twill, and faced inside with the material of which the suit is made. Sometimes skilful workers put a pocket in the front of the blouse. This looks very smart and pretty when the blouse is new and fresh, but it is not satisfactory in the long run. Boys are apt to fill their pockets too full with all sorts of extraordinary things, and the weight of these articles drags the blouse, and makes it lose its shape. Mothers who wish the suit to wear should dispense with the pocket in the blouse.

Jacket Suits.—When a blouse is not approved, or when a change of shape is considered desirable, the knickers for which the pattern has just been given might be worn with a waistcoat and jacket. For these garments the following patterns are given:—

The Waistcoat.—Cut the fronts of the waistcoat of the material by Fig. 15. Also cut the same in the twill lining. Cut false pieces of the material by the dotted lines in Fig. 15, two pieces to each front. Tack the lining to the front, having laid the false pieces on the front of the waistcoat, and run them to it near the edge. Untack, turn them, and tack again on the wrong side, and then stitch the edges. Or tack the false pieces first over the lining on the wrong side, and bind the edges with binding.

Cut the back of double lining, or a piece of jean and lining, by Fig. 16. Stitch the side and shoulder seams of the upper part of the back to the fronts. Turn down and hem the lining over the fronts. Turn in the edges of the top and neck of the backs, and run them together. Turn in the edges of the armholes, and run them together. Stitch on two straps behind, or two strings, to tie in the waistcoat to the size of the figure, but let it be easy.

Fig. 17 is the pocket. Make it of lining or material,

and stitch it to the waistcoat before tacking on the lining at all. The *under part* is stitched on the wrong side. When the waistcoat is finished, a piece like Fig. 18 is stitched over the lower part of the mouth of the pocket to cover the opening.

Measure of the front:—*r* to *n* (Fig. 15), the length, fourteen and a half inches; *a* to *b*, the length, eleven

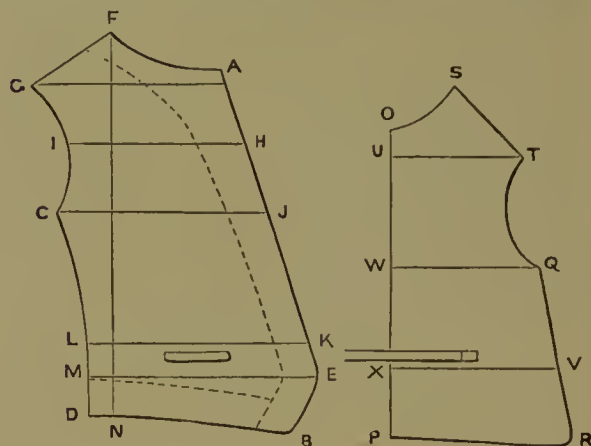


Fig. 15.

Fig. 16.

and a half inches. The width, *g* to *a*, six and a half inches; *i* to *h*, five and a half inches; *c* to *j*, seven and a half inches; *l* to *k*, six and three-quarter inches; *d* to *b*, ditto; *m* to *e*, seven and a half inches; The shoulder, four inches. Under the arms, seven and a half inches.

Measure of the back:—The length, *o* to *r* (Fig. 16), thirteen and a half inches. The shoulder and under the arm, the same as the front. The width, *u* to *t*, four and a half inches; *w* to *q*, six and a half inches; *x* to *v*, six and three-quarter inches; *p* to *r*, seven inches. Only half the back is given in the diagram and in the measurement; but the two pieces of the back are cut in one from double material.

The pocket (Fig. 17) is four inches wide at the mouth, and three and three-quarter inches deep.



Fig. 17.



Fig. 18.

The Jacket.—This is cut without a seam, from the diagram (Fig. 19), and sits excellently. It is lined with black alpaca. The lining is tacked to the jacket. A facing is cut of the material by the dotted line, *j h*, and also run on. The shoulder-seams of the jacket are then stitched together, turning back the lining, which is laid down and tacked on the back of the shoulder, the front laid over it, turned in, and hemmed down. The edge is now bound all round with galloon to match in colour. A single button fastens it at the top. Before tacking on the lining, in the first instance, and as soon as the material is cut out, make a pocket as wide and twice as deep as

Fig. 17, and stitch it on, with a piece like Fig. 18 over it. The slit for the pocket is cut from *x* to *o*.

The measure is:—The length, *r* to *s*, sixteen inches. The width, *a* to *r*, thirty inches; *r* to *d*, twenty-nine inches. The shoulders are formed by joining *A* *I* to *G* *J*, and *L* *M* to *B* *K*. The necks, *B* *A*, *E* *L*, and *G* *C* will require measuring.

The sleeve (Fig. 20) is cut in two pieces; also the lining, which is twill. Trim the upper side with braid, like a cuff; then stitch the sleeves together. Run the lining separate. Run it to the cuff of the sleeve, on the wrong side. Turn the lining in. Take it an inch from the top. Stitch the sleeve to the jacket. Turn down the lining, and hem it over the join.

Measure of the sleeve:—From *A* to *B*, eleven inches; *c* to *D*, fourteen inches; *e* to *A*, five and a half inches; *D* to *B*, four inches.

Measure of pocket:—Four inches wide at the mouth; nine inches long.

Another easy and inexpensive way of clothing boys at the seaside, or during play-hours, is to provide them with home-made trousers of the kind here described,

and a woven jersey, such as can be bought at any clothier's for a small sum. So long as the jersey is sufficiently large, it will be very comfortable, very tidy, very warm, and very healthful. If, however, it is small and tight, it will be most injurious. Complete "jersey" suits are also sold, and they are excellent for every-day wear.

It will, it is hoped, be evident from the suggestions here given that making boys' suits at home is a very simple business; yet it is undoubtedly a profitable

one. Mothers might save more by making their boys' suits than they could possibly do by making shirts and calico under-clothing. There is a good deal to show for comparatively little stitching in work of this kind; whereas in making linen and calico under-clothing, there is a good deal of stitching with very little to show. Mothers, therefore, who wish

to economise, could scarcely do better than try the patterns here given; and it is hoped that they will be found fairly easy and straightforward, so that after one or two efforts success will be secured.

Materials.—One of the advantages associated with making boys' suits at home is that it enables a mother to turn old garments to account. When economy has to be considered, we may be quite certain that there is no surer way of effecting it than that of buying material of good quality. Such material, if judiciously chosen, wears long, and looks handsome to the end; and that end is not reached until it has been cut up into frocks and suits for the children, after it has been worn as "best" and "every-day" garments for their elders. When there is a family, and when the little boys wear sailor suits, there is always something that can be cut up to make suits for them. Not only the father's coats, trousers, and overcoats, but the

mother's winter dresses of serge, home-spun, flannel, or velvet, and her summer dresses of holland, cambrie, ticking, or Galatea stripe, will make capital suits for the boys, for whom, in summertime, there is nothing better than washing-suits. These suits are very easily and quickly washed, they are exceedingly cool and comfortable, they always look fresh and

neat, and they cost a mere trifle. They are also very easily made, because they do not need to be lined. Winter suits, on the other hand, are warmer and more substantial if lined; and unless the lining fits well, and is put in carefully, the suit will have a home-made look. The lined suits, therefore, need to have pains bestowed upon them; but unlined suits can be made without any difficulty.

In making boys' suits from cast-off garments which once belonged to their elders, it is best to cut up the clothes, brush, clean, or wash them, and press them well. The old seams should not be used; they will be likely to break away if stitched a second time; therefore, instead of ripping the garment, it will be advisable to cut the cloth close to the seams. The thin parts, too, should be left out. Then the pattern can be laid on, and the pieces cut to shape. The new seams, after being stitched, should be carefully pressed, open, with a hot iron; this is a very important detail, and attention to it will do much to give the suit a tailor-made look. The lining should be of a darker shade than the material, and the silk used in sewing should be of a shade that will wash. Blue is a very favourite

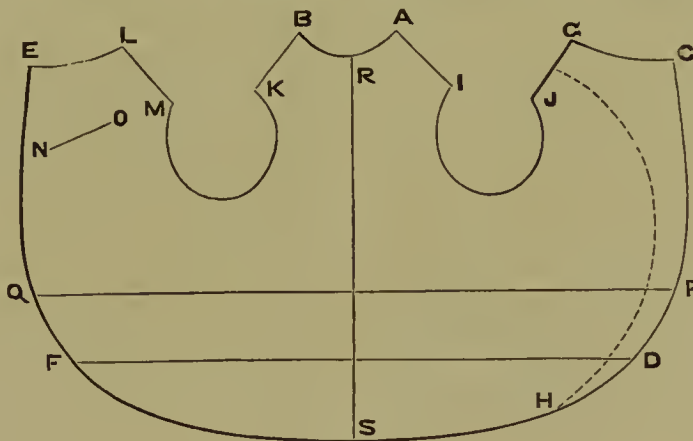


Fig. 19.

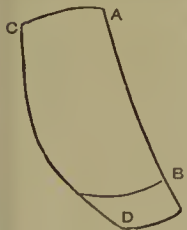


Fig. 20.

colour for boys' snits; and blue is best stitched with black, because blue is so liable to fade, while black thread on blue is practically invisible.

When new material has to be bought for boys' snits, it is important that the quality should be of the very best. The pieces left after cutting-out should be carefully preserved, and put where they can be readily brought to light. Additional buttons, too, like those employed, should be put with the patches, to supply the place of those which may be lost. A button of a different sort to the rest is very noticeable, and yet a special shape and pattern is not

always to be had after it has once gone out of the market. Flannel, homespun, serge, and velvet are the materials most usually employed for boys' suits. In summer, a boy never looks better than when dressed in dark blue serge knickers, with a blouse made of white drill, a blue sailor collar, and a front put on separately to cover the neck. This front can be made of white flannel or of striped blue-and-white jersey cloth. It fits best when made double, to cover both back and front; and it may then be made to meet on one shoulder, and button on the other.

THE TREATMENT OF POISONING AND CHRONIC POISONING.

THERE is probably no department of medicine in which greater strides have been made during the last ten years than in the treatment of cases of poisoning. The action of various drugs has been carefully observed, both in the lower animals and in the human organism, and definite rules have been formulated for antagonising the effects of all the active poisons. At the same time it must be remembered that these rules are not absolute, and that every case must be treated on its merits. When to give the antidote, and how much to administer, and how frequently it should be repeated, cannot be taught from books, but must be acquired, little by little, by the careful observation of a number of patients. This art has of late years become a distinct speciality; and doctors who have made this subject their study are now frequently called in for consultation in critical cases. So much depends on what is done, and how it is done, that no hesitation should be felt in endeavouring to obtain the best advice when life is at stake, and the patient has to be snatched from the jaws of death. As a rule, there is little or no time for consideration, for poisons act quickly, and give little opportunity for investigation or reflection. The following directions are based, in the main, on the rules laid down in the sixth edition of Dr. Murrell's work entitled "What to Do in Cases of Poisoning."

Opium.—This drug is largely employed for suicidal purposes, and is the best example of what is called a narcotic poison. It is contained in many preparations, such as Laudanum, Black Drop, Dover's Powder, Godfrey's Cordial, Chlorodyne, Nепenthe, Dalby's Carminative, Locock's Pulmonic Wafers, Battley's Solution, and Syrup of Poppies. Most of the patent "soothing" medicines intended for infants contain opium. The chief active principle of opium is morphia, or morphine, which is much

more powerful than opium itself. The mortality from taking fatal doses of opium, either accidentally or intentionally, is simply enormous.

There is usually a preliminary stage of mental excitement, of a more or less agreeable nature, with quickening of the heart's action. This is soon replaced by headache, weariness, a sensation of weight in the limbs, incapacity for exertion, sleepiness, and contraction of the pupils. At first the patient can be roused with difficulty, but very soon it is found that no impression can be made on him. He cannot walk, cannot talk, and seems perfectly oblivious of all that is going on around him. The eyes are half shut, the pupils will not act to light, the muscles are powerless, the lower jaw falls, the skin is cold, and the face and lips are pale or livid. The pulse fails, the breathing becomes slower and slower, and, unless something is done to rouse the patient, death quickly ensues.

In many cases opium-poisoning has been mistaken for the effects of alcohol. The odour of the breath is characteristic, but it may happen that the dose of poison has been taken in stout or some other alcoholic liquid. In cases of profound drunkenness the pupils are usually dilated.

Children are very susceptible to the action of opium preparations, and even a small dose will kill them. Death sometimes takes place in less than an hour, but, on the other hand, life may be prolonged for some days.

Some people by long habit obtain an immunity from the effects of opium, and take large quantities apparently without any injurious effects. It is said that De Quincey, the English Opium-Eater, for a period of eight years, during which he was a *dilettante* opium-eater, enjoyed perfect health, and was never better in his life. It was only when he took the drug in large quantities that his health suffered. It must be admitted, however, that im-

PLICIT reliance cannot be placed on these statements, and the sufferings of Coleridge are well known. Yet the Chinese are a nation of opium-users, and they are a muscular and well-formed race; the labouring classes being capable of great and prolonged exertion under a fierce sun, and in an unhealthy climate.

In a case of opium-poisoning, immediate steps must be taken to get rid of the drug—or, at all events, of as much of it as has not been absorbed by the stomach. If there is a stomach-pump at hand, it may be employed; but as a stomach-pump is not found in every household, and as some skill is required to use it, it will usually be found more convenient to give an emetic. The best plan is to send to the nearest chemist, and get thirty grains of sulphate of zinc, which should be given in a little water. When sulphate of zinc cannot be obtained, a table-spoonful of ordinary mustard-flour should be beaten up in a glass of water and administered at once. The patient should be kept walking about, and should not be allowed to sit down or rest, even for a moment, or he will go to sleep. He should be flapped on the face and hands with a wet towel, and ammonia or sal-volatile should be applied to his nostrils. There will be no harm in pouring a jug of cold water over his head from time to time. Anything which annoys him and rouses him is beneficial. This may seem a cruel mode of treatment, but it is much more unkind to leave him alone, as he will assuredly die. The injection of a pint of hot strong coffee into the bowel is beneficial. Stimulants of all kinds are uniformly injurious, as they increase the tendency to sleep. A battery, if at hand, will be found most useful, and the current should be applied freely and strongly to the limbs. A doctor should be sent for at once, as cases of opium-poisoning are always serious, and not uncommonly terminate fatally.

Morphia, or Morphine, being the chief active principle of opium, produces the same symptoms as the drug from which it is derived, and demands the same treatment. Many cases of poisoning from the use of over-doses of morphine given hypodermically or sub-cutaneously are recorded every year. No patient should ever be allowed to use hypodermic injections himself. Dr. Bartholow says:—

“The introduction of the hypodermic syringe has placed in the hands of man a means of intoxication more seductive than any which has hitherto contributed to his craving for narcotic stimulation. So common now are the instances of its habitual use, and so enslaving is the habit when indulged in by this mode, that a lover of his kind must regard the future of society with no little apprehension. For

every remote village has its slave, and not unfrequently several, to the hypodermic syringe; and in the larger cities, men in business and in the professions, women condemned to a life of constant invalidism, and ladies immersed in the gaieties of social life, are alike bound to a habit which they loathe, but whose bonds they are powerless to break.”

Dr. Murrell gives these directions for the cure of the morphine habit:—

I. In slight cases, when the administration of the drug is still in the hands of the medical adviser, the following rules may be found useful:—

1. Do not stop the injections suddenly.
2. Diminish the dose gradually, and without telling the patient.
3. Do not give morphia alone, but combine it with atropia.
4. Diminish the dose of morphia, and increase the dose of atropia until the effects of the latter predominate. When the full effects of the atropia are experienced, the patient will complain that the injections have lost their effect, and will ask to have them discontinued.

II. In more confirmed cases, when the administration of the drug is in the hands of the patient, the following hints will prove of service:—

1. The patient must give up the custody of the syringe and morphia solution.
2. The dose must be diminished gradually, so as to make but little demand on the moral strength and self-control of the patient. The rate of reduction should not exceed $\frac{1}{10}$ gr. every three or four days.
3. The bowels should be kept well open.
4. Tonics should be given—quinine or nux vomica with capsicum and hydrochloric acid, for example.
5. If the patient cannot sleep, give bromide of sodium in half-drachm doses in plenty of water every night at bed-time. The dose may be repeated if necessary.
6. If the stomach is irritable, or if diarrhoea is a prominent symptom, give carbonate of bismuth in half-drachm doses in milk three times a day. Another good remedy is carbolic acid and tincture of iodine, equal parts, a drop in water three times a day before meals.
7. If much depression, stimulants may be given, but cautiously, and only in measured doses. Dry iced champagne is useful, and so is eoca wine.
8. Isolation may have to be resorted to, but it is better to keep your patient occupied and amused. Theatre-going is a valuable therapeutic agent.
9. The patient must be fed up. A good cook is half the battle.
10. One of the most valuable therapeutic agents in these cases is MASSAGE. It is impossible to lay down definite rules for its employment which will be

applicable to every case. Every case must be taken on its own merits. The form of massage to be employed, and the frequency and duration of the *séances*, are important matters for discussion. Electricity is useful, and should be employed in conjunction with the massage.

Chloral is now largely used as a means of procuring sleep, and many accidents have occurred from its incautious use. It is generally taken in the form of syrup of chloral, but many patent medicines vaunted as remedies for sleeplessness contain the drug, and if taken to excess are very deadly.

After a large dose the patient falls into a profound sleep, verging on stupor. The face is congested, and the pulse is usually slow and feeble. The breathing is sighing in character, or it may be accompanied by a peculiar snoring sound. The temperature rapidly falls, so that the hands and feet become excessively cold. Death ensues from failure of the heart's action.

The great point to attend to is to procure the elimination of the poison from the stomach by the prompt administration of an emetic. It is most important to keep the patient warm. Hot blankets frequently renewed, hot-water bottles to the feet, hot bricks, and other similar means will assist in accomplishing the object. The patient must be roused in every way possible, and should not be allowed to sleep. A strong electrical current applied to the limbs will be found of the greatest assistance. Death rarely occurs for some hours, so that there is plenty of time to obtain the services of a physician skilled in the treatment of cases of poisoning.

The custom of taking chloral *habitually* for the sake of its narcotic and sedative effect is unfortunately greatly on the increase amongst all classes of society. The habit once acquired is rarely conquered, unless the patient can be placed under strict medical supervision. The craving for the chloral becomes overpowering, and as the accustomed dose loses its effect it is gradually increased; while the sufferings of the victim, if denied the accustomed drug, are as great as those of the opium-eater. The facility with which syrup of chloral can be obtained without a prescription is a terrible evil. Many ladies keep it in their dressing-cases, fly to it for every trivial ailment, and when it is too late realise for the first time the untold misery and danger of the practice. In these cases the only safe course is to place all the circumstances of the case before some physician who makes such subjects his speciality.

Belladonna. — Poisoning by Belladonna or Deadly Nightshade is far from uncommon. The

plant grows wild in many parts of the country, but is scarce. It is found chiefly in shady lanes and under hedges, especially in the neighbourhood of ancient ruins. The berries are of a shiny black colour, and are about the size of a cherry. The root and leaves are very poisonous, and all parts of the plant contain the active principle atropine. A great number of cases of belladonna poisoning occur from swallowing the liniment by mistake.

It is difficult to say how many berries would cause death, but with good and prompt treatment there would be a good chance of recovery if not more than fifty had been swallowed. Death has resulted from drinking a drachm of the liniment.

The symptoms are sufficiently characteristic, and can hardly be mistaken. The patient always complains of heat, and dryness of the mouth and throat, difficulty in swallowing, and excessive thirst. The face is usually flushed, the eyes are prominent and sparkling, the pupils are widely dilated, and distinctness of vision is interfered with in a very marked degree. There is delirium, which is noisy in character, the patient usually thinking that he has to undertake a journey or transact some important business. There is no desire to sleep, but, on the contrary, there is a wish to be up and about. The muscular power, however, is weak, and the patient staggers in his gait. There is often a strong desire to pass water, with, perhaps, an inability to do so. A rash resembling that of scarlet fever is sometimes produced by the drug.

There is no possibility of confounding opium and belladonna poisoning, as their symptoms are not at all alike. In opium poisoning the patient's one desire is to sleep, whilst in belladonna poisoning he is excited, and most anxious to be up and doing something. The state of the pupils will at once serve to distinguish between the two conditions, for in opium poisoning they are small and contracted, whilst in belladonna poisoning they are large and dilated. Sometimes people who have taken belladonna have been supposed to be suffering from mania or *delirium tremens*. It is a curious fact that children are less susceptible than adults to the influence of belladonna.

When a poisonous dose of belladonna has been taken, the first thing to be done is to administer an emetic of an ounce of ipecacuanha wine, or twenty grains of sulphate of zinc in a wineglassful of water. Should neither be obtainable, a table-spoonful of mustard-flour may be given in a cupful of water. Stimulants may be administered in moderate quantities, preferably in the form of brandy or whisky. Mustard-poultices, or mustard-leaves, may be applied to the calves of the legs, and hot-water bottles or hot bricks may be used for the feet. The cold douche

to the head will be found useful. Should there be signs of failure of respiration, artificial measures must be resorted to at once. The attendance of a medical man will be required.

Aconite.—The plant known as Aconite, Monk's-hood, or Wolf's-bane, is found growing in every cottager's garden, and is a most deadly poison. The root is often mistaken for horse-radish root. The tincture of aconite has been mistaken for a cordial, and on several occasions the liniment of aconite has been taken by mistake. Most patent medicines for the relief of pain, and the cure of neuralgia, contain aconite, and should be used with caution. The symptoms of a poisonous dose of aconite are tingling of the mouth, lips, and tongue, with numbness of the fingers, and loss of sensation. Nausea is often experienced, and may be followed by vomiting. Paralysis soon ensues—first of the lower, and then of the upper extremities. The pulse is reduced both in strength and frequency, and the breathing is shallow and infrequent. The prostration is profound, but the mind remains perfectly clear even to the last. Death often occurs quite suddenly after some slight effort, such as an attempt to sit up in bed.

Aconite is a very deadly poison, and even a teaspoonful of the tincture would probably prove fatal. Its activity is due to the aconitia which is contained in all parts of the plant.

The treatment consists, in the first place, of the administration of an emetic, a table-spoonful of mustard-flour in water being well adapted for the purpose. Stimulants such as brandy and whisky, or champagne, should be administered freely, and if not retained should be injected into the bowel. Great care should be taken to maintain the temperature of the body, and the patient should be wrapped in warm blankets, hot bottles being applied to the feet. The circulation may be improved by massage, and a mustard-leaf should be applied over the region of the heart. The patient should be kept strictly in the recumbent position, and should on no account be allowed to sit up, even for a moment, for at least two days after all the symptoms have subsided. These cases of aconite poisoning are always dangerous, and every effort will have to be made to ward off a fatal termination.

Arsenic, or White Arsenic, is a common and popular poison, and is largely used for suicidal purposes. It is but slightly soluble in water, and is tasteless. When sold in small quantities, it is required by law to be mixed either with one-sixtieth of its weight of soot, or with one-thirty-second of its weight of indigo. The soot gives it a greyish ap-

pearance, whilst when mixed with indigo it is blue. These colours are rendered deeper when the powder is mixed with any fluid, a great protection in cases of attempted poisoning. It is to be feared that the provisions of the Act (14 Vic. xiii. § 3) are frequently evaded. Arsenic is a constituent of many of the "vermin killers" and "rat pastes," and is contained in most "fly papers."

The symptoms of acute poisoning by arsenic usually make their appearance in from a quarter of an hour to an hour. The sufferer complains of faintness, depression, burning pain in the stomach, and nausea. He vomits almost continuously, and is purged, the motions being mixed with blood. The purging is attended with excruciating cramp-like pains in the calves of the legs. The pulse fails, the respiration becomes shallow, and death ensues from collapse.

Slow poisoning from arsenic occurs when the drug is given constantly in doses insufficient to cause death at once. The patient complains of loss of appetite, of soreness at the pit of the stomach, and of nausea, vomiting, and diarrhoea. There is progressive weakness and wasting, and the sleep is broken or disturbed by dreams. The eyelids become red and swollen, there is thirst and dryness of the mouth, and a rash appears on the skin. A chronic cough is not uncommon, and may be attended with spitting of blood. Arsenic is often introduced into the system unintentionally. For example, many wall-papers contain arsenic, and it is by no means confined to those which are green in colour. Many cases of chronic illness have been traced by prolonged and careful investigation to the paper used to cover the walls of the room. Arsenic is found, not only in wall-papers, but in candles, carpets, advertisement cards, wrappers for sweets, floor-cloths, and numerous other articles. If the wall-paper is suspected to contain arsenic, it should be sent to a chemist for examination and analysis.

Many curious cases of poisoning by arsenic have occurred from time to time. A few years ago a number of children died somewhat suddenly and unexpectedly, their symptoms answering to no known disease. An investigation followed, and it was found that the violet powder which had been used for them was adulterated with nearly half its weight of white arsenic. It is probable that the arsenic had been added to the violet powder in mistake for "terra alba" or sulphate of lime, which is often used as one of the ingredients. Some years ago at Bradford seventy people were taken ill, and seventeen died from the effects of eating peppermint lozenges which by some terrible mistake had been made with arsenic. Arsenic is used to clear the "fur" off boilers, and several accidents have happened in this way, the

water drawn from the boiler being used for cooking purposes, or to make tea.

The best treatment for poisoning by arsenic is to give an emetic, to begin with, and then to administer dialysed iron in doses of a wineglassful frequently. When there is no dialysed iron at hand, take a tumbler of tincture of perchloride of iron, throw in three or four table-spoonfuls of carbonate of soda, spread a pocket-handkerchief over the mouth of another tumbler, and filter. Another good remedy is magnesia, which may be taken in practically unlimited quantities. This may be followed by a wineglassful or more of castor oil, or, if that cannot be obtained, of olive oil. The great point is to give plenty of the antidote, and to give it at once. Barley water may be useful in allaying the straining, and hot-water bottles will be required to keep up the warmth of the body.

In cases in which slow poisoning by arsenic is suspected, the only thing is to remove the patient right away, and to place him with people who have no interest in his death. It is useless talking about the matter; and the whole case should be placed in the hands of a scientific medical man who makes poisons his speciality, and he should have full powers to act.

Tartar Emetic, a preparation of antimony, is in large doses an active poison. It has been taken in mistake for Epsom salts, and sometimes for bicarbonate of soda. Practical jokers have been known to put tartar emetic in beer for the pleasure of watching its effects, and death has sometimes ensued.

The symptoms which follow an over-dose of tartar emetic are a metallic taste in the mouth, nausea, incessant vomiting, burning heat in the throat, soreness of the mouth, difficulty in swallowing, intense thirst, and cramp in the arms and legs. The skin is usually cold, and covered with clammy perspiration. The pulse soon becomes weak, the patient faints on the slightest exertion, and, unless promptly treated, dies.

The symptoms are very like those of poisoning by arsenic, but in antimony poisoning there is never suppression of urine. When the poison is given in small doses, and at irregular intervals, the patient may be supposed to be suffering from some chronic disease, such as ulcer of the stomach or cancer. Fortunately these poisons are detected with the very greatest ease in the vomited matter, and in the body after death, even after many months.

One of the best-known cases of poisoning by tartar emetic was that of Mr. Bravo, which occurred in 1876. It was conclusively shown that he died from the effects of antimony, but how it was ad-

ministered was never ascertained. A verdict of wilful murder by some unknown person was returned.

The treatment in cases of poisoning by antimony or tartar emetic consists in the administration of an emetic followed by teaspoonful doses, frequently repeated, of tannic acid or gallic acid, in water. Tea or coffee administered freely would probably prove useful. The patient should be kept warm, and stimulants may be given with advantage.

Corrosive Sublimate is the Perchloride of Mercury. It has often been taken in the form of the lotion by mistake. The symptoms it gives rise to are a metallic taste in the mouth, a sense of constriction in the throat, extending to the stomach, nausea and vomiting, profuse purging, and a cold clammy condition of the skin. The urine is usually suppressed, and death may be preceded by convulsions. After the administration of an emetic, white of egg, unboiled, should be given freely in milk, flour, arrowroot, gruel, or barley water. Stimulants will probably be required, and a doctor should be summoned without delay.

White Precipitate is also a preparation of mercury, but it is not a very active poison, although it is frequently taken with suicidal intent. The symptoms it produces are vomiting, cramps, purging, griping pains in the stomach, and convulsions. The treatment should consist of the administration of an emetic, followed by unboiled white of egg mixed with water, and given in practically unlimited quantities. Flour-and-water, arrowroot, gruel, linseed tea, and barley water are also useful, and should be given freely.

Cantharides, or Spanish Fly, is frequently administered for criminal purposes. It has been often mixed with chocolate, in which its presence is detected only with difficulty. The symptoms to which it gives rise are burning sensations in the throat and stomach, with pain and difficulty in swallowing. The vomited matter is usually mixed with blood, which may contain shining particles of the powder. Diarrhœa often ensues, the motions consisting of, or being mixed with, blood and mucus. There is usually great irritation of the bladder. Peritonitis or inflammation of the lining membrane of the abdomen, loss of consciousness, and convulsions terminate the scene. The treatment consists in the employment of the stomach-pump, the administration of demulcent drinks, such as barley water, white of egg and water, gruel, and linseed tea. Oil should never be given in any form, as it dissolves the drug, and renders it more active. Hot baths, and the application of large hot linseed-meal

poultices, may prove useful when the more acute symptoms have subsided.

Carbolic Acid in all its forms is a very deadly poison, and accidents constantly happen from its incautious use.

When the poison is swallowed in a concentrated form, the patient usually experiences a hot burning sensation extending from the mouth to the stomach. The lips and mouth are white and hardened. The skin is cold and clammy, and the eyelids and ears are livid. The pupils are contracted, and the urine, if any should be passed, is almost black. Insensibility supervenes, the breathing is impeded, and death soon follows. The best antidote is Epsom salts, an ounce or more being administered in a tumbler of hot water. This may be followed by the whites of a dozen raw eggs, and an ounce of castor oil or salad oil. The patient should be kept warm, and a doctor should be summoned at once. The chances of recovery are generally small.

Bluestone, or Sulphate of Copper, is frequently taken either by accident or with suicidal intent. The use of copper utensils in cooking may give rise to symptoms of poisoning. Pickles, too, often contain copper, which is added to give them a green colour. The symptoms of an over-dose of copper consist of a metallic taste in the mouth, severe griping and pains in the abdomen, nausea, vomiting accompanied with much straining, purging, and possibly suspension of urine. The treatment consists in the administration of an emetic, such as an ounce of mustard-flour in water, followed by barley water *ad libitum*, and the application of linseed-meal poultices to the abdomen.

Acetate of Lead is another metallic poison which often induces dangerous symptoms. In the majority of cases, however, the lead is taken unintentionally. Dr. Murrell enumerates the following methods by which lead may be introduced into the system :—

1. **OCCUPATIONS.**—(a) *House Painters* often suffer from lead-poisoning, from want of care in washing the hands before taking food. In grinding the carbonate, which is largely used as a basis for paints, the fine particles are inhaled in sufficient quantity to produce lead-poisoning. Sleeping in freshly painted rooms has been known to produce it.

(b) *Compositors* often suffer from handling the type, type-metal containing lead.

(c) *Barmen* suffer from handling and cleaning pewter pots.

(d) *Card-players* suffer from the lead glaze on cards, especially if they moisten the fingers in the mouth in dealing.

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2. **ARTICLES OF DRINK.**—(a) *Water.*—Drinking-water often becomes contaminated with the lead dissolved from lead pipes and the lining of cisterns. Pure water, and waters containing carbonic acid, carbonate of lime, or sulphate of lime, have little or no action on lead. Carbonic acid, indeed, acts as a protective by covering the lead with a fine insoluble film of the carbonate. Water containing much oxygen, nitrites, nitrates, chlorides, and especially organic matter, acts quickly on lead. Even a very small quantity—as little as $\frac{1}{60}$ gr. in a gallon—may suffice to produce lead-poisoning. Water containing $\frac{1}{20}$ gr. to the gallon should be rejected as unsafe.

(b) *Wine* is sometimes sweetened with acetate of lead, and has produced lead-poisoning. Bottles are sometimes cleaned with shot, and if these are accidentally left in the bottle the wine may become contaminated.

(c) *Spirits.*—Rum stored in leaden tanks on board ship has caused lead-poisoning in sailors.

(d) *Cider* made in glazed earthenware vessels may prove injurious.

(e) *Lemonade* and *Soda Water* may produce lead-poisoning when patent syphon tops are used.

(f) *Beer* is often contaminated by the lead pipes, and people who take the first glass in the morning are especially sufferers.

(g) *Tea* packed in lead is equally liable to produce lead-poisoning.

3. **ARTICLES OF FOOD.**—(a) *Farinaceous Foods* wrapped in lead are unsafe.

(b) *Pickles*, when the jars or bottles are capped with leaden tops, are very injurious.

(c) *Loaf Sugar* sometimes contains lead from the moulds in which the sugar is set being painted with white lead, a portion of it being mechanically taken up.

4. **MEDICINES.**—Lead given medicinally has been known to excite chronic lead-poisoning, but it is of comparatively rare occurrence from this cause; and the acetate is often given in five-grain doses, three times a day, for weeks, or even months, to check diarrhœa or hæmorrhage, without producing bad effects.

5. **ARTICLES OF APPAREL.**—(a) Lead in the lining of hats has produced symptoms of lead-poisoning.

(b) Brussels lace is often whitened with a preparation of lead.

6. **DYES AND COSMETICS.**—(a) *Hair Dyes* are a constant source of lead-poisoning.

(b) *Cosmetics* containing lead have proved injurious to actors, actresses, and professional beauties.

In some cases of well-marked lead-poisoning, the source of introduction of the poison may not be discovered even after the most careful investigation.

The symptoms of lead-poisoning are as follows :—

SYMPTOMS.—(a) *Blue Line on the Gums.*—The blue line is observed at the edge of the gums, where they join the teeth. It is one of the first symptoms to appear, and the slowest to disappear. It is always most marked opposite the incisors. It is absent when there are no teeth, and is most marked in people who fail to clean their teeth. Sometimes it extends to the whole of the gums, and even to the contiguous portions of the cheek. It is produced by the sulphuretted hydrogen developed from the tartar of the teeth penetrating the gums and forming a black sulphide with the lead.

(b) *Colic. Lead Colic. "Painter's Colic."*—This is a tearing pain, usually referred to the region of the navel. The abdominal walls are retracted and rigid, and the pain is usually relieved by pressure, but not always. It is probably due to irregular contraction of the involuntary muscular tissue of the intestines. It is often accompanied by obstinate constipation and impairment of digestion.

(c) *Cramps.*—There are often cramps in the calves of the legs, sometimes in the penis and scrotum, or, in women, in the uterus. There may be pains in the joints, especially of the extremities, often simulating rheumatism, and aggravated by cold and wet weather.

(d) *Lead Paralysis, or "Wrist-Drop."*—Usually of the fore-arm, but general paralysis may occur. As a rule, there is only loss of motor power, but there may be loss of sensation.

(e) *Abortion.*—Lead is a prolific cause of abortion, and women working in lead frequently suffer in this way. The father may cause abortion even when the woman is not a lead-worker.

Gout is due to an accumulation of uric acid in the blood, and lead in people predisposed to this disease may produce an attack.

The treatment of lead-poisoning is as follows:—

(a) Blue pill, saline draught.

(b) A mixture of sulphate of magnesia, sulphate of iron, dilute sulphuric acid, spirits of chloroform and peppermint water, three times a day for four days. Tincture of belladonna may be added if there is much colic.

(c) A course of iodide of potassium, to eliminate the drug.

(d) Good diet, cod-liver oil, extract of malt, Parrish's chemical food, Fellows' syrup of hypophosphites.

(e) Warm baths, Turkish baths, shampooing, massage.

(f) Electricity, the Faradic or continuous current being employed.

In every case of lead-poisoning, or suspected lead-poisoning, a doctor skilled in the investigation and treatment of such cases should be consulted.

Nux Vomica contains an active principle known as strychnine. It is the ingredient in many of the "rat pastes" and "vermin killers," and produces, when taken internally, very marked symptoms. Several deaths have occurred from eating pheasants, larks, and other birds which have fed on wheat poisoned with strychnine.

The symptoms produced by the administration of large doses of nux vomica or strychnine are so marked that they cannot be mistaken. The patient suffers from severe convulsive attacks which strain every muscle, and cause the body to be violently arched either backwards or forwards. During these attacks, which are excited by the slightest movement, and often last a minute or more, the eyes are protruded, the pupils are dilated, the breathing is arrested, and the patient is in danger of being suffocated. The mind remains perfectly clear, and the agony of fear with which the unfortunate sufferer contemplates the onset of an attack is painful to witness.

This condition of tetanus, as it is called, differs from the tetanus of lock-jaw in several important respects, a consideration of which is needed to arrive at a correct opinion as to the nature of the seizures. Lock-jaw follows a wound or injury of some kind, whilst the tetanus of strychnia comes on after food, or drink, or a dose of medicine has been taken. In the convulsions of lock-jaw the muscles of the lower jaw are notably affected, the muscles of the limbs and of the chest being less frequently involved. The interference with the power of breathing is always very marked in poisoning by strychnia. When the convulsions are due to poisoning, the symptoms subside in a few hours, or the patient dies. If the symptoms continue for some days, it is not a case of poisoning—unless, indeed, the drug is being secretly administered in small successive doses, which is hardly likely when once suspicion is aroused.

The tests for strychnia, both chemical and physiological, are extremely delicate. Dr. Dupré, who has had much experience in such investigations, thinks that he could detect even so small a dose as $\frac{1}{200000}$ of a grain. The physiological test, which is of extreme delicacy, consists in injecting under the skin of the frog a drop or two of the substance supposed to contain the poison. When strychnine is present, it produces the same symptoms, or much the same symptoms as in man. The experiment is often made in the interests of justice, and has been the means of bringing to light many a dastardly crime. The experiment need not be painful to the frog, for precautions are taken to prevent the animal suffering.

In a case of suspected poisoning by nux vomica or strychnine, the treatment must be prompt, or it will

be of no avail. The first thing is to administer an emetic of a table-spoonful or more of mustard-flour in water. Next, half an ounce of bromide of potassium should be given in half a tumblerful of warm water. This is as much as can be done without the aid of a doctor. *The patient should not be moved, or even touched, more than is absolutely necessary*, as any such trifling irritation may bring on a convulsion, which otherwise might not have taken place.

Digitalis, or Fox-Glove, is a powerful heart-poison, and in over-doses causes death.

The symptoms consist of purging and vomiting, the vomited matter having a grass-green colour. The pulse is always slow, and very feeble. The pupils are dilated, and the skin is covered with perspiration. Death often ensues quite suddenly.

One of the most celebrated cases of poisoning by digitalis was that of Dr. de la Pommerais, who insured the life of a woman named Pann for £22,000, and then gave her digitalin, the active principle of digitalis, from the effects of which she died. No poison was detected in the body by chemical analysis, but it was shown in evidence that shortly before her death the deceased had vomited on the floor. A spirituous extract was made of the scrapings of the wood, and of the substance deposited between the planks. A few grains of this extract were injected into a dog, who soon suffered from vomiting and depression of the heart's action, and died in twenty-two hours. Similar effects were produced in a rabbit, and on this evidence the prisoner was convicted and executed.

In cases of poisoning by digitalis, the first thing to be done is to give an emetic of twenty grains of sulphate of zinc in water, or an ounce of ipecacuanha wine, or, failing either of these, a table-spoonful of mustard-flour, so as to induce copious vomiting. Tiekling the back of the throat with the finger or a quill pen, and the administration of greasy tepid water, may facilitate this object. As soon as the patient has evacuated the contents of his stomach, half a teaspoonful of tannic acid or gallic acid should be given in hot water, or, failing either of these, a cup of hot strong tea or coffee may be administered, and repeated after a short interval. The patient should be kept strictly in the recumbent position, and stimulants, such as hot gin-and-water, sal-volatile, and chloric ether, should be given freely. The attendance of a doctor is absolutely necessary.

Prussic Acid, or Hydrocyanic Acid, is not only a very deadly poison, but it kills with marvellous rapidity. The symptoms make their appearance in less than a minute after the drug has been swallowed, and very often the patient is dead

in less than five minutes. Probably a teaspoonful of the dilute acid of the Pharmacopœia, which is only a two per cent. solution, would prove fatal. What is known as Scheele's acid is twice this strength.

The symptoms occur with such rapidity that it is almost impossible to say in what order they follow. Even in the act of swallowing, the patient may fall down insensible. The eyes are fixed and staring, the limbs are powerless, the skin is cold, and covered with clammy perspiration; respiration occurs in gasps only, at long intervals; and the pulse is imperceptible. The patient dies almost as rapidly as if he were shot or stabbed in a vital part. The "lightning action" of the drug is its great characteristic. It is usually said that there is a peculiar cry or shriek, which Dr. Letheby believes to be the immediate precursor of death; a true death-scream, and "the last act of vitality."

It seems almost absurd to speak of the treatment of such cases, for there is no time to procure remedies. A strong dose of sal-volatile, whisky, brandy, gin, or champagne, will do more good than anything. But there is no time to fetch it; it must be there, on the spot, and must be taken at once, if it is to save the patient's life. If stimulants are administered freely, there may be time to give a hypodermic injection of atropine, which is the true physiological antidote. With such promptness recovery is not absolutely hopeless, of which proof has been given. A few years ago a doctor aged sixty took by mistake a drachm of prussic acid. He immediately discovered his mistake, and seizing the next bottle, poured out a large dose of sal-volatile, and drank it off. He fell down insensible, but other remedies were promptly administered, and in less than fifteen minutes all the symptoms had passed off, and he was actually able to walk upstairs. There is no doubt that but for his presence of mind, and knowledge of the necessity for prompt action, he would have died.

Oxalic Acid is not often employed as a poison, but cases sometimes occur. It is not very fatal, for in some instances recovery has ensued after half an ounce has been taken. The symptoms vary somewhat, but usually the patient complains of burning pain in the stomach, cramps in the legs, and a feeling of constriction in the throat. Vomiting is not uncommon, and is beneficial, as it helps to get rid of the poison. The best antidotes are chalk, lime, and whitening, given freely in water. Lime-water is also useful, but a pint or more should be taken. Carbonate of potash, and, in fact, all salts of potash, soda, and ammonia, do harm. A table-spoonful of castor oil will assist in expelling the poison from the intestines.

Antidotes.—In hospitals, dispensaries, infirmaries, schools, and all large establishments where a number of people are employed or are congregated together, a few simple antidotes should be kept in readiness for the treatment of any case of poisoning that may occur. They should be kept, distinctly labelled, on a shelf, and arranged side by side. They should not be locked up, or probably the key will not be forthcoming when they are wanted; but it should be distinctly understood that no one is at liberty to use them except in case of emergency. The list need not be an extensive one, but should include:—

Sulphate of Zinc,	Dialysed Iron,
Mustard-Flour,	Magnesia,
Sal-Volatile,	Tannic Acid, and
Chloric Ether,	Bromide of Potassium.

They are simple remedies, and are harmless.

A very useful "antidote bag" is made by Mr. Martindale, of New Cavendish Street, London, and is well adapted for colonial stations and use on board ship. It would prove useful to a medical man.

Messrs. Burroughs, Wellcome, and Co., of Snow Hill Buildings, London, supply an "antidote case" which is a marvel of cheapness and compactness. It contains, in addition to a stomach-tube of novel construction, the following drugs, labelled as below:—

Calcined Magnesia.—May be used *ad libitum* in poisoning by acids.

Chloral Tabloids, 10 grs.—After an emetic, three tabloids of chloral and six of potassium bromide should be dissolved together in hot water, and given repeatedly in strychnine poisoning.

Dialysed Iron.—Antidote for arsenical poisoning. After washing out the stomach with stomach-tube, give the bottleful (2 oz.). Send for more, and repeat this quantity often.

Oil of Turpentine (French).—In phosphorus poisoning, after an emetic of sulphate of zinc, half a teaspoonful of this may be given every half-hour. Morphine afterwards.

Zinc Sulphate Tabloids, 10 grs.—Used as an emetic in poisoning by aconite, antimony, belladonna, carbolic acid, chloral, mushrooms, and phosphorus.

Dose—three or more 10-gr. tabloids, dissolved in hot water, by the mouth.

Potassium Bromide Tabloids, 10 grs.—In poisoning from nux vomica or strychnine, after giving an emetic of apomorphine, six tabloids of potassium bromide, with three of chloral, dissolved together in hot water, may be given repeatedly.

Tannin Tabloids, 5 grs.—These form insoluble tannates with alkaloids. In poisoning from antimony or nux vomica, give five or six tabloids, crushed and dissolved in hot water.

Sal-Volatile.—Given in poisoning by aconite, antimony, arsenic, digitalis (fox-glove), prussic acid, and mushrooms.

As questions affecting the sale of poisons often arise, it may be well to give some information respecting the laws by which chemists are bound in these matters. Unfortunately many of these are often most criminally disregarded.

Poisons for legal purposes are divided into two classes. Class I. comprises arsenic and its preparations, prussic acid, cyanide of potassium, strychnine, and all poisonous vegetable alkaloids and their salts, aconite and its preparations, tartar emetic, corrosive sublimate, cantharides, savin, ergot of rye and its preparations, preparations of prussic acid, preparations of cyanide of potassium, and of all metallic cyanides, preparations of strychnine, preparations of atropine, and "vermin killers," if preparations of poisons included in Class I. Class II. comprises oxalic acid, chloroform, belladonna and its preparations, essential oil of almonds, opium and all preparations of opium or of poppies, preparations of corrosive sublimate, preparations of morphine, red oxide of mercury, ammoniated mercury, and the tincture and all vesicating liquid preparations of cantharides, chloral hydrate and its preparations, compounds containing "poisons" prepared for the destruction of vermin and not subject to the provisions of Class I.

On the sale of any poison, the box, vessel, or cover in which it is contained, must be labelled with the name of the article, the word "poison," and the name and address of the seller.

No poison included in Class I. may be sold to any person unknown to the seller, unless introduced by some person known to the seller; and upon every sale the seller must, before delivery, enter in a book kept for the purpose the date, name, and address of the purchaser, the name and quantity of poison sold, and the purpose for which it is required, and must also cause the purchaser, and the person introducing him, to sign their names as well.

Further restrictions are imposed on the sale of arsenic, except where it forms part of a medicine compounded according to the prescription of a member of the medical profession. If the purchaser be not known to the seller, a witness to the sale, who must be known to both, is required, and the sale must be made in his presence. The seller must, before delivery, enter in his book the date of sale, the name of the purchaser, his place of abode, his condition and occupation, the quantity of arsenic sold, and the purpose for which it is required, and must also sign his own name after such statement, and cause the purchaser to sign his name and address.

Arsenic must not be sold to a person under age; nor may arsenic be sold unless, before the sale, it is mixed with soot or indigo, in the proportion of one ounce of soot or half an ounce of indigo, at the least, to each pound of arsenic. If the purchaser states

that the arsenic is required, not for use in agriculture, but for some other purpose for which such admixture would render it unfit, the arsenic may be sold without any admixture, but in quantities of not less than ten pounds at a time.

PRESERVED AND TINNED MEATS, VEGETABLES, AND FRUITS.

THE subject of preserved meats is one that scarcely meets with the attention from the public that it deserves. By means of this wonderful modern invention the food supply of the whole world has been increased, as the superfluities of one country can supply the deficiencies of another. For, bear in mind, by preserved meat we not only refer to the Australian meat which for many years past we have been enabled to have in tins, but also to the frozen meat which now is sent by hundreds of tons from the other end of the world, and which has been so mainly instrumental in bringing down the price of butcher's meat in this country. Fortunately for the poor in England, we have free trade in the necessities of life in the shape of wheat and meat—for in the present day we may now number meat among the necessities. Some fifty years ago, or more, the poorer classes rarely tasted meat at all; now the exception is the other way. In the olden days a poor man was content with a piece of fat pork or bacon on Sundays, and during the week he hardly ever looked to meat as an article of daily food. Now, however, things have altered. Whether the poor are happier in consequence of this improved food it is not for us to say, but the law of the universe is universal as to general advancement, and consequently we find that what was luxury in one age becomes a necessity of the age to follow.

There is no doubt that the majority of men in this country work far harder than they did a century back. It is doubtful whether average men of the last century possessed the mental strength to perform a really hard day's work, such as is now done by our leading writers on the press—who are, perhaps, the hardest-worked men of any profession—or a hard-worked barrister or doctor. Take as an instance the work carried on in our Government offices. Fifty years ago the old riddle, "Why are Government clerks like the fountains in Trafalgar Square?" (the answer being "Because they play from ten to four") was very much to the point. All this, however, is changed, and our Government offices, as well as our City offices, contain as hard-working a class of men as any in the country. Indeed, it is only when we get to remote country towns, away from the busy

haunts of men, that we find the old-fashioned, easy-going method of pursuing work.

Increased brain-work requires not so much the increase of food in bulk as in quality. Men who work with their brains require meat, and a very large proportion of even our workmen in the present day have to use their brains as well as their limbs. An Irish navvy or an agricultural labourer, whose thoughts are generally "nowt," can perform an excellent day's work on a dish of potatoes, or still better, a few slices of bread and dripping, probably washed down in the one case by a little whisky, or in the other by a quart of tea. After all, this mode of diet was almost universal, even among the upper classes, not more than one hundred and fifty years ago. Tea is, comparatively speaking, a modern luxury; and there are many now living who can recollect it when it was 7s. 6d. a pound. Any invention that increases the food supply of the nation, especially in so far as it affects our brains rather than our muscles, tends more than anything else to increase the prosperity, happiness, and wealth of the country; for as the world advances we are more and more dependent upon our brains and less upon our limbs.

Frozen Meat.—We will commence to run as briefly as possible through the most important of the various articles of food that can be preserved, either in tins or by other means. First of all, let us have a few words on frozen meat. By this new and wonderful invention all our ships are now supplied with preserved meat, should they so wish, even if they do not stop after passing Land's End till they reach New Wellington Harbour; so long as the carcase is frozen and kept in a freezing atmosphere the meat remains the same. Indeed, there would not be any different method of treating a leg of mutton that had been frozen, say, for one month, or for one year. We have to deal with the meat as it leaves the ice-house, and the first process to which the leg of mutton is exposed is that of thawing. Now, if you go down to the head-quarters where frozen meat is sold, and pick out a leg of frozen mutton, it is to all appearances, till you touch it, the same as an ordinary leg of mutton: that is, the outside fat is

firm and snow-white. If you buy it in this state, you must cook it immediately it has thawed, and this thawing process is best allowed gradually. If you were to attempt to thaw the leg of mutton by placing it in lukewarm water or in a very hot room, and after a few hours cook it, you would find the interior of the mutton round the bone absolutely blue. Thawing is a work of time; and, unfortunately, as the mutton thaws it loses its bright white colour, and goes through a change in *appearance*, resembling that of first-class meat changing into very bad second-class meat. This is, at present, the one drawback to frozen meat: viz., if you buy it in a state fit for cooking, it looks dirty and shrunken, and probably you will smell it in order to see if it is "good," as the impression conveyed by its appearance is undoubtedly that of "high" meat. Should any new discovery be made by which frozen meat will retain its colour, there will be a large fortune for the happy inventor, or more probably for the happy director, who will suck the inventor's brains, and make all the money for himself. We would, however, impress this truth, that notwithstanding this appearance of the frozen meat, it is *none the worse* for having changed colour, and if you allow it to thaw thoroughly when you cook it, and make it a nice brown on the outside, there are not many persons who would know the difference between a leg that had been frozen, and one that had been bought from the butcher who kills his own meat.

One thing further must be impressed upon the housekeeper, and that is that the meat should be cooked *directly* it is thawed thoroughly. The time required for this you will learn by experience, as very much depends, of course, upon the state in which you buy the meat originally. Also remember that frozen meat, when it is cooked, will become "bad" very soon afterwards, even if the weather be fairly cold. There is a law that all substances that have been frozen, after being thawed very quickly decay. Bodies that have been left for hundreds of years intact in the ice or snow of the Arctic regions, rapidly decay when exposed to a temperature above that of freezing. The same law holds good with meat. Should you, therefore, have a leg of mutton for the early dinner to-day, if you treat it like an ordinary leg of mutton, and have it hashed the following day or the day after, probably the hash will be bad. The best plan to pursue in using frozen meat is, when the joint comes down, to cut all the meat off the bone *immediately*. Make a hash then and there, and put plenty of pepper into the gravy, and bring the hash to the boil. Then put it by, and probably next day it will be perfectly good, as by bringing it to the boil you will exclude the air, and also, in the case of mutton, the gravy when cold will

be coated with a thick coat of fat on the top. We have tried several experiments with frozen meat, and have come to the conclusion that it is as nourishing, or nearly so, as perfectly fresh meat, and quite as palatable, as a rule. In this we are not speaking now of well-hung *four-year-old* mutton. That luxury is a thing of the past; but the mutton we eat now is old lamb or very young sheep artificially fattened, too often with oil-cake or unnatural food, consequently the fat has an oily appearance. We are not now speaking, of course, of the very best meat; but really good grass-fed mutton is not so commonly met with, even in the country, as many people would suppose.

Tinned Australian Meat.—Next we will consider the tinned Australian beef. We mention Australian because it is best known by this name, but a very large quantity of the tinned beef comes from South America. So long as it is properly tinned and kept in the tin, it will remain good for any length of time. If the tin is defective and the air has been admitted, it is so bad that it would be thrown away as a matter of course—probably the tin would be half empty, or a mass of maggots. When you open a good tin of meat you will hear a rush of air, and people generally say to themselves, "Oh, that is the air escaping." The fact, however, is the other way. It is not the air escaping from the tin, but the air rushing into the tin, which should be a vacuum.

All tinned goods are made in the same way. First of all the hot cooked meat is placed in a tin. Then the lid of the tin is soldered down with the exception of a little hole in the middle of the tin, not much bigger than that which would be made by a large needle. The tin is now placed in a tank of boiling water, and heated till the steam escapes through the hole. Of course the heat first of all excludes the air in the tins, and the space which would be occupied by air is now occupied by steam. We all know that a dash of cold water will condense steam. The man, therefore, who is fastening up the tinned goods, takes in one hand a dash of cold water, and in the other hand an iron holding a little dab of solder. With his left hand he for one second condenses the steam, and almost simultaneously puts a dab of solder over the hole. The tin is now removed from the heat, and placed in something cold. The consequence of this is that all the air is excluded, and the tin contains the meat and jelly only. The fact of the air being excluded is the secret of the meat being preserved good; and consequently, when at some future period we stick our opening-knife into the tin and expose its contents, if we hear this little rush of air it is almost proof positive that the contents of the tin are good.

Tinned Food not Poisonous.—We now come to the fundamental process of using and eating meat and other things that have been preserved in tins, without their being injurious to us in any way. This subject is so important that we shall dwell upon it as largely as possible. We often from time to time hear stories of men or women or children, generally the latter, being made ill or even poisoned by “eating tinned meats.” When this is the case the blame is attributable to the housekeeper, and not the man who tinned the goods. We will take as an instance that very common dish to be met with at many breakfast-tables—tinned lobster. Some people are very fond of tinned lobster for breakfast. Too often you will find that the tin will be opened in the dining-room. It is placed on a plate, and after breakfast what is left is put back in the cupboard, just as if it were tinned sardines. That is just where people go wrong. We all know, or rather we all ought to know, especially if we are cooks or housekeepers, that if we make any kind of ordinary soup and leave it all night in the saucepan, it will spoil. Suppose we have that very nice soup known as bisque, which is made from crab or lobster, and to which cream has been added, what cook in her senses would allow a fishy soup to remain in a tin saucepan all night? Again, suppose you have a piece of boiled salmon, and some is left to get cold for the next day, what cook in her senses would put by the remains of the salmon in a tin saucepan, and put the saucepan on the larder shelf? No one. But if we ask, “What lady in her senses would put by some tinned salmon or tinned lobster in a tin saucepan and leave it there all night,” and if we substitute the tin itself for the saucepan, the answer will be, “A great many people do this foolish and dangerous thing every day.”

The reason that tinned goods (if they do) hurt us or affect us injuriously, is that we leave them too long *in the tin itself*. So long as the air was excluded from the tin, the tin would have no effect upon the food. The bright tin would not oxidise away from the air. But the moment the air is admitted, the inside of the tin becomes to all practical purposes exactly the same as the inside of a tin saucepan. Indeed probably, from the inferior quality of the tin, it would be still more liable to corrode than the saucepan. And yet day after day hundreds and thousands of persons insist upon opening these tins, leaving perhaps the lobster or salmon to remain there for days together, and then they complain that they are poisoned! The fault is entirely their own.

Therefore let us impress upon you the following invariable rule:—Whenever you use *any kind of tinned goods*, when you open the tin, *turn out the*

whole of the contents. For instance, suppose you have a tin of apricots, and the interior of the tin is not enamelled, as it is in some cases. Suppose you use half the tin of apricots to-day, and put by the remainder of the tin for use to-morrow. How often do cooks put by the tin itself half full? The answer is, “Repeatedly;” and then you complain of tin-poisoning. The fault is entirely your own.

There may be perhaps one or two exceptions to this rule, and that is, where the things are preserved in oil. If you open a tin of sardines or of preserved pilchards, it is customary to put the tin back with some of the sardines in it if the tin has not been finished. The reason that you get no harm is, that the tin is covered with oil, which excludes the air as much now as it did before the tin was opened. But in the other case of preserved meats, especially the two just mentioned, besides hundreds of other varieties of potted meats of all kinds, it is essential that you turn out the whole of the contents of the tin itself. It is a great pity that the purveyors of these articles do not place such directions in large letters on the tin itself, and perhaps these remarks may have the effect of calling attention to this subject. A notice on each tin to the effect, “*When you open the tin, turn out the contents immediately,*” would be amply sufficient to do away with the risks by which these tinned goods are necessarily accompanied, owing to the invincible ignorance of the large majority of the people who eat them.

We will now run through a few of the most generally known articles of food preserved in tins, the first of which is Australian meat. Perhaps the best way of having this served is as it is—perfectly cold. It requires cutting with a very sharp knife, as it has a tendency to crumble, and there is an ingenious little invention by which the meat can be kept together when served cold. A case is made in sections or rings, as shown in Fig. 1, which can be removed one by one as the meat is sliced down.

When Australian meat is served hot, there are several ways of turning it to account. First of all, it makes an excellent Irish stew—we are referring not only to Australian beef but Australian mutton. To make Irish stew, proceed as follows:—Get a number of potatoes and onions, generally two pounds of the former to one of the latter, in proportion to the amount of meat contained in the tin. Boil these in a saucepan on the fire and strain away the liquor. Next warm the tin before you open it. This will have the effect of converting all the jelly in the tin to a liquid. Now open the tin, and pour off the jelly into the onions and potatoes which have been strained off in the saucepan. Let the onions and potatoes boil in this jelly for about twenty minutes or half an hour, keeping the lid on the saucepan

exactly as if it were an ordinary Irish stew, so that the flavour of the onions does not escape; and as you boiled the onions previously it would be as well to allow rather an extra dose of them, as a great deal of the onions' flavour will be extracted by the water in which they are boiled, whereas in the ordinary way the flavour of the onion gets into the gravy composing the stew. The chief drawback to Australian meat is, that it is overcooked to start with; consequently, in warming it up our endeavour must be to cook it as little as possible, while the gravy or jelly by which the meat is surrounded will be none the worse for having boiled over and over again. If therefore we boil the onions and potatoes in this gravy for a short time, they will get the full flavour which would otherwise be obtained in making an ordinary stew. Recollect also that both onions and potatoes contain a great deal of moisture, or plain water. Now, in making Irish stew in the ordinary way, if we place originally one quarter of a pint of water in the stew, you will find by the time the stew is finished that there will be a pint or more of liquid, showing that three-quarters of it must have proceeded from the onions or potatoes.

When, however, we boil the onions and potatoes first, we get rid of this fluid, and consequently the stew will be all the better, as the liquid will be the juice of the meat itself. Now take the meat, which we presume was turned out on to a dish directly the tin was opened, after the remarks made above. Place it in the stewpan with the potatoes, onions, and gravy, place the lid on, put a weight on the lid, make it hot through, and when it is hot through serve it. Of course it will require the addition of a little pepper and salt.

Another good way of treating Australian meat is to curry it, and a very excellent curry indeed it makes. Curry is best made from meat that can be shredded. Indeed all old Indians will tell you that good curry should be eaten with a fork. Our English notions of curry, it is to be feared, are very different. Large slices cut off the remains of a cold leg of mutton are warmed up in a bilious, yellow-looking gravy, surrounded by sodden rice, and this is called curry! In the chapter devoted to sauces it is described how to make curry sauce. If you are going to curry Australian meat, you must first of all fry the onions in a frying-pan, and then instead of adding the stock, add the liquid made by warming the tin and

pouring out the melted jelly. At the same time you can turn the meat out by itself on to a large dish. You will now proceed with the curry sauce exactly in the ordinary way, remembering that Australian meat requires what may be called a good deal of flavouring. It is undoubtedly somewhat insipid, and to do away with this we must make the sauce extra strong. This can be done by adding rather more curry paste and curry powder than usual, and also, if economy is not very much desired, by using an extra quantity of extract of meat. When the whole of the sauce has been rubbed through the wire sieve, the meat on the dish can be easily broken up and shredded with a couple of forks, and the curry sauce poured over it. It will absorb a good deal of sauce, but this you will find out for yourself, as of course it entirely depends upon the size of the tin. Now send

this to table in a vegetable dish, and send some boiled rice—boiled in the manner described in the chapter on Vegetables—to table with it in another dish.

The correct way to hand round curry is to hand the rice before the curry. This would be a very good test of a high-class waiter; or it might show that the waiter had had experience with an Indian family, or

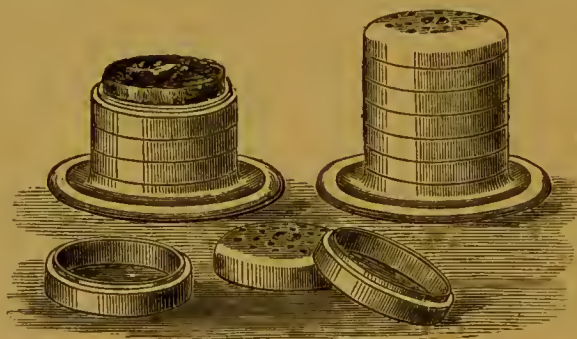


Fig. 1.—CASE FOR TINNED MEAT.

had possibly been a steward on board one of the P. and O. boats. You first of all help yourself to the rice, and having taken a heap of this on the plate, with a spoon make a sort of well in the centre of the rice for the reception of the curry afterwards. Next, when the curry itself is handed you, take a spoonful of the curry and place it in the middle of the rice. The meat should be shredded and the curry should not be too liquid—that is, it should not be in that state, that if you were to break the wall of the well of rice the liquid would run out into the plate. Perhaps one of the greatest and most common faults in making curry is for the cook to make the sauce too liquid. Good curry sauce should be of almost the same consistency as good bread sauce. This can only be obtained by using plenty of onion and other vegetables, such as a little carrot and celery, which is a great improvement, and also by taking great patience in rubbing the whole through the wire sieve.

Australian Meat Pie.—Another way of serving Australian meat is to make a meat pie. For this purpose everything depends upon the gravy. Perhaps it will be best to open the tin cold, and then to see in what condition the gravy is at starting. If it

is a fairly firm jelly, it will require but very little treatment. If on the other hand it is not a good jelly, you will do well to add a little isinglass or gelatine to make it better. Still this is not all. You must take the jelly—not the meat—and put it in a saucepan, and place in it two or three beads of garlic as well as, if possible, a few sticks of celery, a sprig or two of parsley, and a little extract of meat. Now having made the crust, place the meat in the pie-dish, pour this gravy, made from the juice of the meat itself, over the meat, and see if it covers it. As a rule this is generally easily done, because the meat is in such a broken condition that you can almost fit it into the dish without any trouble. Still we do not want to press the meat down in the dish and make it too solid, but on the contrary we should, as much as possible, mix the loose pieces of meat up in the gravy, and avoid pressing the pieces together. This meat pie will require a great deal of black pepper, probably very nearly a dessert-spoonful. Perhaps this is a slight exaggeration, but at any rate quite a brimming teaspoonful. Meat pie, when eaten cold, takes a great deal of pepper.

The beads of garlic we spoke about will have to stew in the gravy some time, in order that the flavour of garlic may be thoroughly extracted. Therefore it is as well to slice the beads into two or three pieces, and then press them in the saucepan with a spoon. Then strain off this gravy and add to the pie, seeing that the gravy entirely covers the meat. If you like, you can place some very thin slices of bacon or ham over the top. Now cover it with paste. Place it in the oven and bake it, only bear in mind that this pie must not be eaten hot, but cold. When cold, of course the gravy becomes a hard jelly, and as the meat, if properly placed in, was mixed up with this, you will have slices of meat in which little streaks of jelly make their appearance from time to time. The flavour of garlic, which would be unpleasant if the pie was eaten hot, will not be found objectionable, except by those who are very fastidious on the subject of garlic, when it is cold.

If possible, after the pie has been baked, get some more of the jelly, and when the pie has got cold, pour this jelly in through the hole in the pastry at the top, so that it fills up the space that would otherwise exist between the meat and the crust. When, therefore, you cut the pie in slices it has all the appearance of a first-class game pie, which we all know is first of all a piece of rich pastry, joined by some bright-looking jelly to some nice forcemeat mixed with game underneath.

The Australian meat required a considerable amount of seasoning. This has been imparted to it by the garlic and the pepper. Should you therefore make one of these pies, recollect that you will have

to use these two ingredients in very considerable quantities, if you wish the pie to have a nice pronounced flavour when cold.

Tinned Soups.—We will now try to take our tinned goods in the order in which they would appear at the dinner-table, although perhaps, strictly speaking, we ought to commence with breakfast. However, we will start with the dinner. First of all, tinned soups. There are quite a variety of soups sold in tins. We may mention real turtle, as well as mock turtle, but will give the list in full, as far as we can recollect, of what soups can be obtained in tins. We can have, in addition to the two just mentioned, the following:—game, grouse, oyster, hare, chicken-broth, giblet, hodge-podge, mulligatawny, ox-cheek, ox-tail (both thick and clear), tomato, cressy, gravy, green pea, Julienne, mutton-broth, Palestine, vegetable, venison, and vermicelli.

The next point to be considered is, How are we to avail ourselves of these soups? as undoubtedly in their present state—that is, just as they are turned out of the tin—they are somewhat flavourless. The reason of this is, that many persons strongly object to highly flavoured soups, and also very often these tinned soups are intended for invalids. Consequently, any strong or pronounced flavour would be undesirable. The following methods, however, can be resorted to in order to make these soups a great deal better, and to put them on a par with the soup made in the ordinary way:—

We can divide our soups into two classes—viz., thick and clear. First of all, suppose we take thick turtle, or thick mock turtle, or thick ox-tail, or thick mulligatawny; you will find that all these will be very much improved by the addition of two things—viz., a good brimming teaspoonful of extract of meat, and about a dessert-spoonful of brown roux, for every pint of soup. After having dissolved the extract of meat, crumble the brown roux thoroughly, and make it into a sort of smooth paste with some of the liquid of the soup. Now put it on the fire, and let the soup boil gently, at the same time stirring the soup with a spoon till it becomes slightly thicker than it was before it was turned out of the tin. In the case of thick turtle, thick mock turtle, ox-tail, &c., you may now add a little sherry—from about half a glass to a glass; and recollect the best wine for the purpose is golden sherry, and not a pale wine like Amontillado. Madeira is better still, and Marsala will answer the same purpose.

In the case of mulligatawny soup, we should first of all make it hot and taste it. This will not of course require wine, although it will probably require the brown roux and extract of meat; but having tasted it, you will know whether it will

require a little more curry paste and a little more curry powder, according as soup very hot, or only slightly so, is preferred. In the case of preparing tinned mulligatawny soup for what we may call an old Indian, we might with advantage probably add a saltspoonful of cayenne, although you must not jump to the conclusion that all Indians like their soups and curries hot. Indeed, we have often been told that people in England generally have their curry hotter than in India itself. Then, on the other hand, history is against us; especially in the case of that famous curry made at old Mr. Sedley's table, where Becky Sharp tried to set her cap at Joss.

Next we come to the thin soups. The majority of these will be improved by a little extract of meat being added; and in some cases, where the soup is not over-well flavoured, by the addition of a bead of garlic, where garlic is liked. Mock turtle soup may be improved by tying up a bunch of marjoram or sweet basil in a little bag, and boiling this in the soup for a time, and then squeezing the bag. Much of the mock turtle soup sold in tins lacks flavour. Now the flavour essential for mock turtle soup is marjoram and sweet basil; a pinch or two of thyme may also be added. The Palestine soup in tins is also improved very much indeed by the addition of a little cream.

Tinned Fish.—We will next take in their turn preserved fish, although probably, as a rule, the fish that is preserved in tins is not suitable for dinner, but rather breakfast. Still, there is one form in which preserved fish may be sent to table for dinner, and that is in the form of curry. Sometimes there may be one or two unexpected arrivals just before dinner, at an inopportune moment. Say the dinner was arranged for two persons, and you have just sufficient soup for the two, followed by two whiting, two mutton chops, and an apple dumpling. One cannot imagine anything more disastrous than three or four persons arriving unexpectedly, who are willing, as they term it, to take "pot luck." It is on these occasions (and they often happen) that a few selections of preserved meats, &c., in the larder (or rather store cupboard) come in so exceedingly handy. In the first place, we can now obtain fresh herrings in tins, as well as herrings preserved like sardines. Mackerel are also to be had in tins, as well as pilchards preserved in oil. We will take the case of pilchards preserved in oil, and may here remark what a pity it is that so many hundreds and thousands of tons of pilchards, which abound in such profusion on our Cornwall coasts, cannot be more utilised as a cheap article of food for those parts of the country where fish is not easily obtained. We

were a short time back staying at Penzance, where the most delicious pilchards can be obtained fresh, at a price generally about six a penny. These are preserved in oil and *exported*, chiefly, we found, to Italy, and to the Continent of Europe. Probably in Catholic countries they are extremely useful where fresh fish cannot be obtained, owing to the distance from the sea, to be used as an article of diet on Fridays.

Now you can make a most delicious dish of curry out of a tin of pilchards in a very few moments, by simply opening the tin and pouring out the whole of the oil into a frying-pan. To this you may add about a table-spoonful of curry powder previously moistened in a little water, and it is also as well to add to this a brimming teaspoonful of cornflour. Mix this up with the oil, and keep stirring it over the fire until the whole becomes a sort of greasy thick gravy. Now put the pilchards in the frying-pan, turn them over gently and lightly without breaking them, basting them in the curry sauce, if such it may be called, and, if you like, you can impart a flavour of garlic to the whole by previously rubbing the frying-pan thoroughly with a bead of garlic. Now turn this on to a hot dish as soon as the pilchards have got really hot through. Put them in the oven for a few minutes, and then send to table. They are extremely nice, and although this curry sauce is composed chiefly of oil, it is wonderful how agreeable a dish can thus be made at a few moments' notice. Of course this dish is equally applicable for breakfast, luncheon, and supper. Sardines and every other kind of fish preserved in oil can be treated in the same way.

We next come to tinned salmon. It is wonderful what a variety of dishes can be made out of this tinned salmon. For instance, we can make a very excellent dish of salmon cutlets, and considering the price that ordinary salmon obtains now, generally about 1s. 6d. a pound, it is just as well from time to time to use tinned salmon by way of experiment. Take a tin of salmon, and pound up the fish in a mortar with a piece of onion chopped very fine, about the size of the top of a thumb down to the first joint. It is also as well to add about a brimming teaspoonful of finely chopped parsley. Now you will recollect that some way back we called attention to the importance of having always in the house some lobster butter. By adding a little of this lobster butter to the pounded salmon, we shall turn the salmon a bright red colour. You will also have to add a little black pepper and salt, or if it is not objected to, and you know for whom you are cooking, some cayenne pepper instead of the black. Add also to an ordinary-sized tin of salmon very nearly a dessert-spoonful of anchovy sauce, remembering first

of all to shake the bottle thoroughly. You can also add, if the mixture is somewhat dry, a little butter, but the whole should be pounded until it makes a sort of paste, which can be moulded into any shape you like. Next take small spoonfuls of this mixture and mould them in your hand till they assume the shape of an ordinary cutlet. As we have said before, the shape should be that of a rather large oval picnic biscuit. Next flour these cutlets, dip them into some well beaten-up egg, and then bread-crumbs them and put them by until the egg and bread-crumbs is fairly dry. Recollect the salmon has been cooked before, and we do not want to cook it more than we can help. Now plunge these little cutlets into some smoking-hot fat, and they ought, if properly dry, to turn a bright golden-brown colour in some twenty or thirty seconds. Drain them on a cloth, and put them in the oven for a few minutes to keep hot, and then send them to table with some crisp fried parsley in the middle. If possible, keep by you a number of the small outside red claws of a crab or lobster. If the inside of these claws be well raked out and the claws properly boiled, these will keep good and do over and over again. They are extremely useful for the purpose of ornamenting cutlets, where the inside of the cutlet is not a fluid that will escape by having something thrust into it. Stick one of these little red crab or lobster claws into the corner of each cutlet so as to form a sort of imitation bone. This little bright red stalk considerably increases the pretty appearance of the dish, and these red claws can be used for a variety of other kinds of cutlets besides those we have mentioned.

The salmon cutlets can also be sent to table for breakfast, in which case it is very nice to serve them with some hot pickle sauce. This is made by mixing a spoonful or two of the ordinary hot piccalilli (White's Oriental pickle is perhaps the best), and making this pickle hot, mix it with some good brown gravy. If the pickle is too acid, the acid can be easily got rid of by heating the pickle in a frying-pan, when the vinegar will escape in the form of steam up the chimney.

A very little ingenuity on your part will enable you to make some lobster cutlets almost in the same way from tinned lobster, remembering also that if you have plenty of lobster coral, you need not be afraid of adding an extra quantity. In the case of making salmon cutlets you only add sufficient coral to give it a colour—if you add too much lobster butter you overpower the flavour of the salmon with the flavour of the lobster. But in the case of lobster cutlets you need not be afraid of putting almost any amount of lobster butter to the fish, as it will improve the flavour rather than otherwise.

Tinned salmon can also be used for making sand-

wiches. The meat is pounded somewhat similar to what we have just said, and then the salmon spread between two thin slices of bread-and-butter.

Tinned salmon can also be used for making salmon mayonnaise, but it is not so well adapted for this purpose as the ordinary fresh-boiled salmon. If you make mayonnaise salmon of tinned salmon, it will be best to put in a rather extra dose of anchovies, as the flavour of anchovies very much assists the flavour of salmon, and consequently in using tinned salmon we should require rather more anchovy, or anchovy sauce, as the case may be, than if we had the fresh salmon itself.

Tinned lobster can be eaten just as it is for breakfast, only remember as soon as you open the tin, turn out the contents into a glass dish or plate of any kind. When eaten for breakfast cold, it only requires the addition of a little oil and vinegar. Tinned lobster, however, will make very good lobster sauce, if we have by us that invaluable compound, lobster butter. We do not think that tinned lobster will ever make a good salad. However, it is often used for this purpose by persons who ought to know better. We have even known pastrycooks of good repute send lobster salads to wedding breakfasts and evening parties in which tinned lobster has been mixed with fresh lobster, and no doubt these people were foolish enough to imagine that no one present would find it out. Were it not that we fear an action for libel, we could mention unsuspected names by whom this has been done, and perhaps we may send them a copy of this article with the passage marked in pencil! Of course if you can make lobster sauce out of tinned lobster, you can also use tinned lobster for the purpose of making lobster patties; but personally we would never attempt this, unless at least there was plenty of lobster butter, and we could fall back upon this to give the thing a flavour.

One other form of serving lobster is what is known as bashawed lobster. It is generally made by sending the lobster to table in the shell part of the tail. If you use the tinned lobster, the probability is you have no shells in which to serve it, and in this case therefore you would have to fall back upon scallop-shells. Now to send bashawed lobster to table, you must colour it first of all as red as you can with lobster butter, and then you must chop up a small piece of onion, a little parsley, a teaspoonful of anchovy sauce, and a little mixed black and red pepper, and mix with it. Put it in the shell of a lobster, with a little butter, covered over with some fine bread-crumbs, on the top of which may be sprinkled a few bread-rasps. Make it hot in the oven, and send it to table immediately. With all this, however, a good judge of cooking would tell

what it was made from directly. It is best, therefore, not to try these experiments with persons who may be called particular, or good judges. Taking it all round, perhaps the salmon is easier to manipulate than the lobster.

Another fish, which is, however, now very rarely met with, is the sardine. We do not mean to say you cannot get any amount of tins of "sardines" in every grocer's shop; but ninety-nine times out of a hundred they will be sprats and not sardines. A short time back we endeavoured to look over the three factories at Deal which are devoted to making sardines out of sprats, but were refused admission! They are in the hands of foreigners, and we have no doubt that the sprats caught off Deal are made into sardines and then sent abroad, to be returned to this country for sale. We obtained a tin from Deal, which was marked in full with the maker's name at a town in the south of France. To show how very scarce real sardines are, the chief manufacturers of tinned fish, whose name is known all over Europe and the civilised world, as well as London, have for years past had the honesty to omit putting sardines on their trade list, simply because they cannot supply the genuine article. When sardines can be obtained genuine, they are extremely nice, and it is always best to serve with them a little cut lemon and cayenne pepper. Of course sardines will make a dish of curry by proceeding exactly in the same way as you do with pilchards. If possible have half a dozen bay-leaves, which can be stewed in the oil in the frying-pan, and serve these bay-leaves with the curry.

Sardines are also very nice served hot on toast, somewhat similar to devilled anchovies. That is, you first of all make the sardines thoroughly hot by placing them in the oven in their own liquor—viz., the oil. Then you make a slice of hot, buttered toast saturated with butter. Place the hot sardines on it, squeeze a few drops of lemon-juice over it, add cayenne pepper, and send to table immediately. Too often persons in making anchovy toast, and sardine toast, proceed as follows:—First of all they make the toast, then they put on the cold fish, then they place them in the oven for the fish to get hot, forgetting that in making the fish hot they make the toast dry and insipid. Remember, therefore, always to heat the fish *first*, then make the toast, put the fish on the ready-made toast, and serve immediately. It makes a wonderful difference if you have to cook for epicures.

We will next have a few words about tinned oysters. The most sanguine man would, perhaps, hardly dare to open a tin of oysters, get a dozen oyster-shells, place an oyster out of the tin upon each shell, send it to table, and declare they were fresh

oysters! Perhaps this might be done in America, but we do not think any one would have the hardihood to do it in a city like London. Still, for all that, tinned oysters are extremely useful, and where fresh oysters cannot be obtained, you can undoubtedly make some first-class oyster sauce out of a tin of oysters, which will be very superior to the sauce that you would make out of a couple of dozen fresh oysters, the only drawback to the sauce being that there are no oysters in it at all! This may seem a somewhat Irish expression, but it is true for all that. Our ordinary oyster sauce means a dozen or more oysters floating about in a liquid which contains very little flavour of oyster at all. Consequently the sauce, strictly speaking, is more like melted butter with a very slight oyster flavour.

Now, if you make some oyster sauce out of tinned oysters, you get a very strong flavour of oysters indeed by simply acting as follows. Turn the tin of oysters, liquor and all, into a saucepan. Add to it sufficient white roux to make the whole thick. If possible, add a little cream, and warm up. Next turn this on to a wire sieve, and with a wooden spoon rub the whole of the oysters through the sieve, so that they will help to thicken the sauce. Now add a little more butter, which will dissolve in the sauce, and a brimming teaspoonful of anchovy sauce, a very little lemon-juice, and a slight scrape or two of nutmeg over a grater. This oyster sauce contains a very strong flavour of oysters indeed, for remember that each tin originally consisted of three dozen real genuine oysters. When the tin was hermetically sealed, the flavour of the oysters went chiefly into the liquor, while the oysters themselves, originally so plump and juicy, have shrunk till they look more like the tops of the fingers of a dirty white kid glove.

You can, however, make very fairly good oyster patties out of a tin of oysters, if you allow mushrooms to take the place of the oysters. Suppose you turn a tin of oysters into very thick oyster sauce, made the way we have mentioned—namely, rubbing the whole of the oysters through a sieve. Now take a small tin of mushrooms, and cut these mushrooms up into small pieces not much bigger than a good-sized pea. Mix these with the oysters, liquor and all, make them thick, add the anchovy sauce, and fill some patty-cases with them. The imitation is really very good, and there are many persons who would eat these oyster patties quite unaware that they were made from tinned oysters. We would also recommend the addition, as a rule, of a little cayenne pepper. Of course cream is of very great assistance, both in rendering the mixture richer, and a purer white in colour. This is the difficulty.

In making oyster soup from tinned oysters, of

course you would want about two tins, which can be treated exactly in the way mentioned, and some very strong stock added, which makes a hard jelly when cold, and then added to a quart of milk boiled separately. This boiling of the milk separately makes considerable difference in the flavour of the milk. After you have added two tins of the oysters, of which the whole of the oysters have been rubbed through a wire sieve, you can add a little more anchovy sauce, and the soup will be extremely good. If you now add a dozen or more Blue-points, scalded and cut in half, you have a really first-class oyster soup, which you need not be ashamed to send to any table.

Patés and Potted Meats.—We now come to another class of goods altogether, namely, those rich potted meats or patés that are preserved in tins. These are very often somewhat expensive, especially when they contain truffle. Some of these potted meats, however, are very cheap. For instance, we can have potted beef, potted ham, potted chicken and ham, potted Strasburg meat, potted tongue, and potted turkey and tongues, in tins at very moderate prices indeed. We can also have devilled paté of game, and some jars of *foie gras*. When these are preserved in tins, remember to turn out the whole of the contents of the tin as soon as it is open, and it is always best, if possible, to ornament the dish in some way or other before it is sent to table. There is one very excellent and easy method of ornamenting all these kinds of potted meats, if we will take the trouble to have in the house a small bottle of aspic jelly. Aspic jelly is now sold, not only in quart bottles, but in pint bottles, and a pint bottle will not cost more than about one shilling. Suppose we empty the tin containing the potted meat, and place it in some little vessel, such as a china jar, about the same shape as the tin itself, and not much bigger. Now dissolve a little aspic jelly by putting a hot cloth on the top of the bottle, or holding it for a few minutes in front of the fire, and pour it round the potted meat. Let it get cold, cut it round with a sharp knife, and turn it out. The potted meat, which before looked extremely plain and unappetising, now looks extremely tempting, surrounded by a bright thick coat of clear jelly. A little nice fresh-picked parsley placed round the edge, and a little piece stuck on the top, will complete the dish. This, of course, is a great improvement on any kind of potted tinned meat in the ordinary state.

There are, however, other kinds of potted meat far more expensive than those we have named, of which we might mention a few. You can have patés composed of larks, woodcock, snipe, quail, partridges,

plovers, &c., preserved in tins, to which also truffles have been added. Of course the addition of truffles makes a considerable addition to the expense, and consequently you will have to pay quite double the money for these delicacies, that you would have to give for the other kinds we have mentioned. These, however, are capable of being far more improved in appearance than the former. With the point of a knife, having turned out the whole of the tin, try and pick out one good-sized piece of black truffle. Then smooth the remainder of the outside of the paté with the knife, and take the piece of black truffle and wash it in a little warm water, until all the grease is removed, and then with a very sharp thin knife, somewhat similar to a penknife, cut this black truffle into very fine slices. It is wonderful how much can be done with a truffle not much bigger than a marble. Take a china dish or mould, into which we are going to place the contents of our tin. The best china moulds for the purpose are those (which should be saved) which have contained potted meat. They are oval in shape, generally about four to six inches long and about half as wide. You very often see this shape of white china moulds in pastrycooks' windows containing potted meat, which as a rule, whatever the meat may be, tastes only of anchovy sauce. The top is generally covered with a rich-looking yellow butter—namely, clarified butter.

Now pour a little of the aspic jelly into the bottom of your mould, just sufficient to cover the bottom, and then place these pieces of black truffle so as to form any kind of shape that may be desired—a star perhaps is best. Place the largest piece of truffle in the middle, and then smaller pieces, until you come to the outer rim (see Fig. 2). In fact you place these little pieces of truffle on the thin coat of aspic jelly at the bottom of the dish, and when it turns out it forms an ornamental top. Then pour a little more aspic jelly on the top and let it get cold; then put in the entire contents of the tin—say it is tinned woodcock. Then gradually fill up the whole of the mould with aspic jelly. When the whole is cold, you can turn it out, and these little pieces of black truffle when turned out will form the top, and will make their appearance in the jelly at the top. Another improvement is to sprinkle tiny sprigs of parsley in the jelly, and these will settle and look like little trees floating in the jelly itself. This is now a very pretty dish, and very superior indeed to what would be produced by placing the bare tin on the table.

By carrying out this idea you can ornament almost any kind of potted meats preserved in tins that are sent to the table as an accompaniment either to breakfast or luncheon. Perhaps the best form of preserved meat for this purpose is that which is

known as "entire *foie gras*." This is made of the enlarged livers of those unfortunate animals which are kept in a dark cellar and nailed down to the floor in Strasburg, in order to produce the desired effect of having the liver a great deal bigger than it otherwise would be. In fact, *paté de foie gras* is made from the diseased livers of geese, the liver disease being brought on for the purpose, by artificial means almost too horrible to describe. Whether it is right to eat it may be a real moral question; but the cook must not here discuss this.

These *patés* cut in slices and arranged in a mould of aspic jelly (see Fig. 3) form a very excellent supper dish. Of course, *foie gras* is an acquired taste; but the class of persons who frequent balls which close at three or four in the morning, are the class who have probably acquired this taste, and you always find at any supper party that a dish of *foie gras* preserved in aspic jelly meets with universal acceptance, especially amongst gentlemen. It would be not at all suited, however, to bring forward at a children's evening party, although in the present day there is a growing tendency on the part of young children to admire lobster salad, game pie, and even champagne, in preference to the more early and simple tastes of our parents when they were young.

It is very simple putting these slices in the middle of the jelly, although it requires time. It is best for the purpose to put a bottle of aspic jelly in a basin of boiling water, and after it is partially melted; to proceed as follows. First put a very thin film of jelly at the bottom, and place this, if possible, in some chopped ice and salt. After this is done, if you have a copper mould well tinned inside, the jelly will set almost immediately. You then put a layer of *foie gras* cut in slices—about an eighth of an inch thick would be ample. Then, with a spoon, ladle out sufficient aspic jelly to cover these slices. This, as soon as it is set, can be followed by another layer, and so on, until the mould is filled up to the top. You can also ornament the lower part of the mould (which, of course, when turned out becomes the upper part), by placing in the corners or round the edge a little wreath of small pieces of bright parsley, only take care that the parsley is perfectly clean and perfectly dry; for if the parsley is the least wet, it will give the jelly the

appearance of containing bubbles of air, and will destroy the effect. And the effect stands for a great deal in these kinds of dishes.

Of course, there are many other substances that can be placed in jelly in a similar way. Jelly-glasses or custard-cups can be used as moulds for aspic jelly in which have been placed a few mixed vegetables known under the name of *macédaines*, which are so useful for general ornamental purposes. These *macédaines* consist of small pieces of vegetable cut up, of different colours. They are generally composed of red carrot, white turnip, and green peas, and sometimes French beans. A few of these vegetables placed at random in a small glass or mould of aspic jelly, about the size that would be made by placing it in a custard or jelly cup, form a very pretty ornament to place round a dish of cold fowl or cold turkey that has been glazed.



Fig. 2.—TRUFFLE ORNAMENTATION.

Tinned Vegetables.

—These *macédaines* bring us to the subject of tinned vegetables in general. We can now obtain in tins asparagus, French beans, *macédaines* (already described), green peas, and various others; but these, being the most important, will serve as a guide for

using the rest. Now, of course, it would be affectation to say that tinned vegetables are really equal to fresh; although we cannot say the same of fruits, for in this country tinned apricots as a rule are very superior indeed to any apricots you may buy ripe, as they are falsely called, at greengrocers' shops. But in the case of vegetables it is different.

First of all with regard to that most popular vegetable—green peas. These vary very much indeed in tins. Good green peas should be young, and light in colour. When you get tins of peas somewhat old, large, and very dark, they are inferior, and will not have that freshness of flavour which is peculiar to these young and small peas. This of course depends upon the price you pay, and upon the importer who gets over the peas, as a great many of these tins come from abroad, although latterly in some parts of England they are preserving vegetables in tins, where they have the machinery for preserving other things in tins at other seasons of the year.

With all vegetables as a rule it is best to make them hot in the tin. Some people think differently. But then recollect a good deal of the flavour of the

peas, &c., or whatever the tin contains, has already imparted itself to the liquor in which the peas were boiled. Now if you drain off the peas and make them hot afterwards you lose some of this flavour. The best way, therefore, of serving all tinned vegetables, is simply to put the tin into a large saucepan of boiling water, and as none of the water can reach the inside of the tin, you can warm up the tin of vegetables in anything that may be handy. For instance, suppose you have for dinner an ordinary dish of potatoes and a dish of tinned peas. You can place the tin of peas, or the two tins as the case may be, in the same water that is boiling the potatoes, and thus avoid having more than one saucepan on the fire for vegetables at the time. In some houses the cook very often has to manœuvre a great deal, and especially if she wants to have eight saucepans kept hot at the same time on a fire-place that will only hold six. As soon as the water boils after the tin is placed in it, you must not take it for granted that the whole tin is thoroughly hot, but you should let the water boil for three or four minutes longer. Then take out the tin and put a cloth round it, as it will be too hot to hold; open it sufficiently wide to let the vegetables turn out; strain them on to a sieve or colander, and place them in the vegetable-dish. It now depends upon the nature of the vegetables, as to whether anything further should be done to them or not. In the case of green peas, of course, our endeavour is to make them taste as much like fresh peas as possible. Now fresh peas are generally served with a few leaves of mint with them. Have therefore ready three or four sprigs of mint, in order that these may be placed with the peas when sent to table. Fresh green peas also are rather sweet, and tinned peas have somewhat lost this sweetness. We should therefore add to the tin of peas about half a saltspoonful of finely powdered sugar. Some persons will also add about an equal quantity of salt. Sprinkle the sugar over the peas, and toss them lightly together with a spoon for about half a minute, so that the sugar is equally mixed, and then send them to table immediately, placing the sprigs of mint on the top. A large number of persons will

imagine that the peas are fresh if they are sent to table in this manner.

French beans will bear the addition of rather more sugar than the peas, especially if you intend to send them to table as a separate course. Further, in this case, we should recommend you always to add a good-sized pat of butter. If the vegetables, however, are to be handed round with the meat, add the sugar very sparingly, and do not put any butter at all.

Asparagus simply requires making hot in the tin, and then the tin must be very carefully opened; as the difficulty about tinned asparagus is to take the stalks out of the tin without breaking them. This requires some care, and unless you cut the top off completely from one end to the other, you will find it somewhat difficult.

The best way to treat a tin of this kind, after you have succeeded in cutting off the top, is to make a good slice of toast. Drain off the water from the asparagus, after you have made a very small incision in the tin sufficient to allow the water to escape, only then bend the top right back, or cut it off completely. Place the slice of toast on the top of the tin, turn both upside down together, and place the toast at the

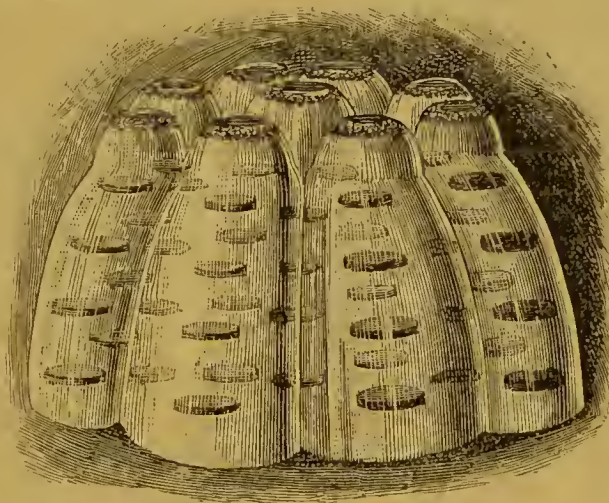


Fig. 3.—SLICES OF "FOIE GRAS" IN JELLY.

bottom of the vegetable dish. Now remove the tin, and send the asparagus up in this form, and not in the usual form—half on the side of the dish and the green part resting on the toast—as very often, in the case of *tinned* asparagus, if you do this you will break off the green top from nearly every stick. Also, take care, after you have turned the tin upside down, to see if any of the little green asparagus tops remain in the tin. These are of course the tit-bits, so to speak, and they should be all raked out and scattered over the green part.

We do not know whether to call the mushroom a vegetable or not, but it is one of the most useful articles in high-class cookery that we have. What a French cook would do without mushrooms it is hard to say—probably retire altogether from the profession. Nearly every kind of rich forcemeat and rich sauce owes part of its goodness to the small tinned mushrooms, which are *far superior* for most purposes of cooking to the fresh-gathered mushrooms to be obtained in the fields. The fresh mushrooms are extremely nice, and can be met with sometimes as large

as a soup-plate. In this form they are best fried with a little butter, when they somewhat resemble a very tender rump steak in flavour. Some people think they are unwholesome, but there is a great deal of fancy in this. The mushrooms we now have to deal with are the tiny button mushrooms which are sold in tins. These are now a great deal cheaper than they used to be. A small half-tin of mushrooms can now be bought for sixpence, or even less, while a tin of full size can be had for about tenpence.

Were we to give recipes for all the dishes in which tinned mushrooms are used, we should have to write a cookery book of a very considerable size; but if you were to take the trouble to go through *Cassell's Dictionary of Cookery* and make a mark against every recipe in which mushroom is mentioned, and then count them, you would have some idea of how useful these little button mushrooms are. One of the most delicious sauces made is white mushroom sauce. This is very simple if you have a little good white sauce to start with. All you have to do is to take some really good white sauce, and add to it a tin of mushrooms, liquor and all; then rub the whole through a wire sieve, and if it is not of a good colour, try and add a little cream. There are few white sauces so delicious as this, and it is far better in this form than if the mushrooms were cut up fine and simply placed in the white sauce.

Brown mushroom sauce can be made exactly in the same manner, by emptying a small tin of mushrooms into some good, thick, rich brown gravy. Then rub the whole through a wire sieve and serve hot. We have already mentioned how useful these little tinned mushrooms are in making mince, in which case they are mixed with red tongue, white chicken, and black truffle; and also in making imitation oyster patties, by being mixed with a tin of oysters rubbed through a wire sieve. They have been referred to in making tomatoes *au gratin*, &c. Mushrooms are used in almost every variety of rich sauce. They are also used in dishes like *Tête de veau en tortue*, &c.

Preserved Milk.—Another very useful article which we got now preserved in tins, which should not be omitted, is that capital invention known as Swiss milk, or milk preserved in tins. There have been one or two attempts to preserve milk in tins unsweetened, but, so far as we are aware, at present it has been a failure, though we have no doubt in time people will succeed. The drawback, if such it may be called, to Swiss milk in cooking, from a cook's point of view, is that it cannot be used for any other purpose except sweets. If we could have really good first-class Swiss milk free from sugar,

we should be able to make Béchamel sauce, *sauce suprême*, white sauce, &c., without troubling the dairyman for so-called cream. (We are speaking now from a London point of view.) However, in the case of sweets this Swiss milk is almost invaluable.

We have already described to you how to make horseradish sauce. Here we required two ingredients—cream and sugar—and, as was explained before, a good spoonful of Swiss milk supplied the place of both. In making custards, therefore, by putting in less sugar and using Swiss milk, you make a considerable saving, and at the same time have a better custard. Care, however, must be taken not to make the custard *too* sweet. In making cornflour puddings and moulds of so-called blanc-mange—which is not blancmange at all—the addition of a spoonful or two of Swiss milk is a very great improvement. In making various kinds of cream, such as strawberry cream, raspberry cream, &c., Swiss milk will very often take the place of ordinary milk, especially in London, where cream is so difficult to obtain. The great majority also of the so-called cream ices which are sold in London at a penny a glass, contain, as the price almost informs us, absolutely no cream at all, but are made by adding Swiss milk to ordinary milk and cornflour, and a few yolks of eggs, in order to give them richness of colour as well as flavour.

Really first-class ices may be made by flavouring this mixture, which ought to be very sweet, with essence of vanilla. In making ices, however, remember that the ice when melted tastes a great deal sweeter than when frozen. Therefore, if you taste the mixture before you freeze it, it *ought* to taste too sweet, as when it is frozen some of this sweetness will be taken away. Excellent ices can also be made by adding some preserved fruit in tins to this mixture. For instance, suppose we take a tin of Swiss milk, two or three yolks of eggs, a little plain milk, and then rub through a wire sieve the whole of a small tin of ripe apricots, liquor and all. If the mixture when completed looks too light in colour, you must add some more Swiss milk. Now freeze the mixture, and you have first-class apricot cream ice. If we calculate the cost, we shall see what an enormous profit we could make by retailing it out at sixpence a glass; and yet this is the usual price charged at a pastrycook's, unless they be in a very fashionable part of the West End of London, when (out of respect probably to the rent they pay) they charge one shilling.

Swiss milk is also very useful in the nursery. Sometimes when a child has not the benefit of a good healthy mother, and has only a "bottle" to take her place, the child will apparently droop.

never mind what quality of milk you obtain for it from the cow. Now, under these circumstances, doctors who have made a speciality of the study of young children, have told us that sometimes, by substituting Swiss milk for ordinary milk, the child will cease to droop and will get fat. Of course by using Swiss milk there is scarcely any limit to the richness of the milk, as by increasing it you can get any strength you like. Of course, too, this Swiss milk should be mixed with water; but here we are trespassing on the border-land which separates the cook from the family doctor, though at the same time we wish to impress upon you the fact, that if you carefully carry out all our directions in cooking, you will hardly require any doctor at all!

Preserved Fruits.—In conclusion, we may call attention to that most useful branch of tinned goods—preserved fruits, and especially to the preserved peaches, apricots, and pears. In the case of apricots, the number of dishes that can be made from them is almost infinite. Still, few forms are nicer than that of serving this ripe and luscious fruit *just as it is*. Empty a tin of preserved apricots into a glass dish, and then pile the apricots up in the centre of the dish in a pyramid form, the curved side uppermost. If you wish to ornament the dish, it can be done very prettily and at very small cost. All you have to do is to take a few preserved red cherries and stick them in all the little corners where one apricot meets the two below it. By cutting up a small piece of green angelica into little strips about an inch long and an eighth of an inch in thickness, you can stick these little green spikes all over the dish, somewhat similar to the manner in which you would stick slices of cut-up almonds in a tipsy cake. The contrast between the red, green, and yellow is always pretty.

Preserved pears are another very popular form of tinned goods. It is always best to turn the pears out and strain off the juice. This juice can, if liked, be clarified; but it is scarcely worth the trouble. If you clarify the juice you have to mix up a couple of whites of eggs, then add the juice to it, beating all the time, and set it on in a small copper stewpan to boil. After it has boiled a short time you can strain the juice, first of all through a sieve, and afterwards through a jelly-bag. This can now, if liked, be made into a light jelly by the addition of a little gelatine, and when you do this, it will save you a great deal of trouble if you first of all take the quantity of gelatine you require and put it into a little cold water to soak. The gelatine will now swell to about three times its original size, and, consequently, if you place it in a cup you must

not fill the cup more than about a third full, otherwise it will swell and topple over. This gelatine, after it has been soaked, will dissolve almost instantly it is put into boiling water. The jelly can now be coloured a bright red with some cochineal, and when it is cold, but not set, the pears can be dipped in it one at a time. Of course, the jelly will stick to the pear, and if the pear is very cold, the jelly will set immediately. If, therefore, you have an ice-chest (and in most large establishments it is almost essential), it would be best to place the pears, after you have strained off the juice, in the ice-chest in order to get really thoroughly cold. Then, by the time you have converted the juice from the pears into a bright red jelly, the pears will be so cold that when you dip them into the jelly, or if you take a spoonful of the jelly and pour gently over the pear, it will set immediately. The pears, of course, can be piled up on a dish, and a little more jelly poured over the whole, so as to make a pyramid form. In ornamenting a dish of this kind you can stick a few very finely sliced pieces of almond in here and there, in order to relieve the uniform colour of the pears. But the red basis is not a nice surface for the purpose of ornamenting at all, and the flavour of the almond is not altogether suited to that of the pear.

Preserved pine-apple is another very favourite fruit. For obvious reasons a whole pine is rather more liable than other fruits to set up acetous fermentation, and now and then a tin may be found rather sour; but good pines are so very nice, that it is well to put up with an occasional mishap of this kind for the sake of the many good tins. Slices of pine can be ornamented very much in the same way as the apricots. Slices of pine may also be dipped in batter and made into fritters.

Variety of Tinned Goods.—Very few people have any idea of the variety of dishes that can be obtained in tins, and we may perhaps quite astonish some by informing them that the following dishes can be obtained, if you order them from some large and respectable grocer, who will in his turn be able to get the supply from the manufacturers direct. These eccentric dishes we are going to mention, we may add, are chiefly made for the purpose of exportation abroad. By way of prelude, imagine a Scotch haggis tinned! yet such can be obtained. So also can Irish stew be obtained in tins, as well as tripe and onions. Stewed beef, stewed kidney, stewed rump steak, and stewed tripe are also sold in tins, as well as veal collops, veal cutlets, calf's head and bacon, minced and curried veal, and mutton chops. We will not enter into any detailed description of these articles, which we regard more in the light of

eccentricities of genius. Still it is something to know that such can be had.

In the way of fish, we can also get in tins filleted sole, fried sole, as well as fried sole in oil, fresh turbot, and even Blackwall whitbait. Probably persons who are ignorant of these facts might be astonished by being served, say somewhere in Central India, with a dish of genuine whitebait, such as they have been accustomed to get at Greenwich or Blackwall; and it is wonderful how good these are, although of course not equal to those fresh caught and well cooked.

In the way of game and poultry, the following things are now preserved in tins:—duck and green peas, boiled and roast fowl, grouse, roast hare, jugged hare, partridges, pheasants in gravy, rabbit and onions, and hashed and roast venison.

We can also have Christmas plum-puddings in tins, as well as tins of mince-meat. These Christmas puddings are extremely good, as we can vouch from experience.

Persons living abroad may also be glad to hear that, if necessary, they can get preserved in tins the following useful accompaniments to cooking:—sage and onions, onions plain, parsnips, and turnips. Now, of course, there may be some circumstances under which these articles would have to be supplied in tins, or we should have to go without them altogether, especially in the case of persons travelling long distances from home, where vegetables of this kind are not obtainable. And if, on the one hand, the West Indies supply us with ripe and juicy pine-apples, we, in our turn, can supply them with sage and onions and haggis. One good turn deserves another.

ETIQUETTE OF THE TABLE, VISITING, AND TRAVELLING.

In the entertainment of friends questions of table-etiquette arise, though minor points of table-etiquette come before everyone's notice day by day at the family dinner-table. These minor points must not in any way be neglected, but must be carefully attended to and studied in childhood. The question of "How we eat," should be nearly as important to us as "What we eat," for the first affects our neighbours and companions, whilst the second only concerns ourselves.

Perhaps in no department of life does good breeding so quickly show itself as in questions of table-etiquette, and in habits and manners during the meal-times. Well-dressed people, whose outward appearance seems to claim for them the title of lady or gentleman, often show signs of want of good-breeding directly food is placed before them. We cannot be too careful how we partake of the dishes set before us at home and abroad. The rules for holding the various articles of the table are too well known to require repetition. Though they are well known, however, and certain positions are recognised as correct, it is not by any means unusual at a public dinner-table to see those rules violated. The knife is used as though it were a spoon, or held as if it were a pen. Yet people who make errors of this kind rarely, if ever, make them from ignorance. The mistake is usually due to carelessness and the formation of bad habits. They forget that they may offend and annoy others by their mode of eating or drinking.

Correct ways of eating and drinking, correct methods of holding the articles of the table, and attention to others at the same table, must be lessons

learnt in childhood, and should be practised daily at the family meal-table. Habits grow, and soon become second nature; and in after-years the man or woman unconsciously conducts him or herself at the public dinner-table in such a way as to offend none.

The Table.—A few hints as to the usual method of eating different articles of food may not be out of place. As a general rule, if the dish is unusual, and the guest is uncertain as to the correct method to be adopted in partaking of it, the safest plan is to wait and watch the hostess or some other guest.

Fish-knives and forks are almost always provided nowadays; but if they are not laid on the dinner-table, a silver fork and piece of bread must supply their place. The fork should be held in the right hand, and the bread in the left.

Soup should be taken from the side of the spoon, as noiselessly as possible.

Certain articles of food are always eaten with the fingers. Olives should be taken from the dish with an olive-fork, but lifted from the plate to the lips with the fingers. Celery should be taken from the dish with the fingers, and eaten in the same way. Watercress and lettuce are taken and eaten with the fingers. If the lettuce is mixed with oil and vinegar, it would, of course, be served with a spoon and fork, and eaten with a knife and fork. Salad-plates (half-moon-shaped) are often provided.

Fish is occasionally served with lemon, and pancakes are usually eaten with lemon-juice, pieces of lemon being served with the portion of fish or pudding. The lemon-juice in such a case should be

squeezed over the plate by holding the piece of lemon in the fingers.

Bread passed round should be taken in the fingers.

Asparagus may be eaten by taking the white stalk in the fingers; and it is almost always eaten thus when served alone, as a separate course. It is, perhaps, more dainty to use a knife and fork; the fork being held in the left hand and used to hold the white part of the stalk, whilst the green head is cut off with the knife.

Globe artichokes—or French artichokes, as they are sometimes called—must be eaten by holding each leaf in the fingers, though a knife and fork would be needed for the purpose of eating the choke.

Sugar must be taken in the fingers if tongs are not provided, though these should always appear in the sugar-bowl.

Fruit may be eaten with the fingers, but most kinds of fruit are usually taken with a dessert-knife and fork. Nuts would, of course, be taken with the fingers, but it is better in eating pears, apples, or oranges, to peel them first by placing the fruit on the fork, and holding it in the left hand and the knife in the right, and afterwards to cut the fruit in small pieces with the knife.

All food must be helped quickly, and eaten quietly. The waitress must be careful to hand the dishes so that the guests can help themselves easily. If necessary, both spoon and fork should be supplied for serving; the guest must feel awkward if delay is occasioned because he or she cannot easily and quickly take a portion from the dish.

Occasionally people get into the way of playing and fidgeting with their knives, forks, spoons, dinner-napkins, &c., during the intervals between the courses. This is a bad habit, which is likely to annoy other people at the same table, and it should be checked. Crumbling the bread, and playing with food in any way, are equally objectionable.

However careful the guests may be, now and then unfortunate accidents occur during a meal; a salt-cellar or a glass of flowers is upset; sometimes, too, it happens that a wine-glass is broken. The guest who is so unfortunate as to have been the cause of such a mishap, does not in the least assist to make matters better by vigorously and energetically apologising to the hostess. It is more polite to say little or nothing, at the time. A skilful, clever waitress will soon remove all signs of the accident, and prevent the attention of the other guests being drawn to it. If the accident is a serious one, it will, however, be well to say a few words of apology to the hostess privately. Whatever happens, whether the guest is disturbed or not, the hostess must always remain calm. If she lose her self-possession,

and appear in the least worried, the guests must lose their enjoyment.

The hostess must also remember that her action in small details gives the key to the other guests. If she use a certain article for a particular dish, they will follow her example. If she fold up her dinner-napkin, no guest may feel at liberty to leave an unfolded napkin lying on the table. No lady will rise from the table until she gives the signal that the meal is finished; and none will seat themselves, before the meal commences, until she has taken her seat.

The hostess must be careful not to urge her guests too vigorously to take a second portion from a dish. It is impolite to be too pressing.

Dishes should not be either strongly recommended or apologised for by the hostess; remarks of the kind would be considered a want of good manners. At the same time, a guest may pay his hostess a delicate compliment by asking for a second helping of a dish, if she has mentioned that it is a favourite. The hostess, in her turn, may please and compliment her guests by remembering any little likes and dislikes they may have. If she is aware that they are partial to a certain dish, it would be a delicate attention on her part to include it in the *menu*.

Although the guests should wait until the hostess is seated, before taking a seat themselves, it is not proper to wait until she is served, before beginning to eat. It is considered quite polite to begin to eat any dish as soon as it is served.

The plates should be removed as soon as they are empty; but the hostess should never allow one of the guests to be left eating, when all others have finished. She should not finish her own portion until all her guests have nearly or quite finished theirs.

In the course of a long dinner it is not likely that any guest would wish to partake of every dish; but, on the other hand, it is impolite to refuse very many dishes. It is far better to take a very small portion than to refuse altogether. The hostess will be made uncomfortable if she thinks that her guests are not taking sufficient, and she will be complimented if the fare she has provided is apparently enjoyed.

A Dinner-Party.—Etiquette, however, is concerned not only with the manner of taking food, and of using the various articles connected with the table, but also with the proper conduct and action of the host and hostess before the meal. In the case of a dinner-party, the question of the order of the guests in going in to the dinner must be settled by the host and hostess before the arrival of their friends; and this order, to some extent, is governed by certain rules.

As each guest arrives, his or her first duty after

the outdoor wraps have been laid aside, is to greet the hostess first, and then the host. The hostess will then, in all probability, introduce any gentleman to the lady whose escort he is to be at the dinner-table. If such intimation does not take place at once, it must be made before the dinner is announced; so that when that time arrives, each gentleman may at once step forward and offer his arm to the lady assigned to him by the hostess.

If the dinner-party is a large one, cards are sometimes placed in the ladies' and gentlemen's dressing-rooms, on which the name of their dinner-companion is written.

The host must lead the way to the dining-room; and at once, on dinner being announced, he should offer his right arm to the lady he is to escort.

The lady who is escorted by the host should be the one looked upon as the guest of the evening, and she should be therefore either the greatest stranger or the lady of highest rank. In the same way the gentleman whom the hostess wishes especially to honour is requested to escort her to the dinner-table, and must sit at her right hand; but she must not leave the drawing-room until all her guests have departed. After the host has left the room the lady of the second highest rank, with her escort, should follow. A husband should never be asked to take his wife to the dining-room, nor a brother his sister.

Each gentleman places his lady on his right hand at the dinner-table; and if name-cards are used, he will have very little difficulty in finding his or her place.

When the hostess has entered the room, seats are taken; and at once the first course is handed round, and the dinner proceeds in the order of the *menu*.

During the dinner each gentleman is expected to devote himself to the lady seated on his right hand. As far as possible he should endeavour to converse on pleasant topics which are likely to prove interesting to both of them. A certain amount of general conversation should be kept up throughout the meal.

As has been already stated, the hostess should give the signal at the end of the meal for the ladies to retire. When she rises, everyone must rise, the gentlemen standing to allow the ladies to pass out. The host, or the gentleman nearest the door, must hold it open for the ladies; and the hostess, with the lady-guest of the evening, should lead the way to the drawing-room.

The ladies having retired, the gentlemen are at liberty to smoke; but after a short interval they should follow the ladies to the drawing-room.

When the carriages arrive, they should be announced quietly to their respective owners, who after a few minutes take leave of their host and hostess

as quietly as possible, and depart. Each guest should endeavour to say a few words on leaving to the hostess, expressing thanks for a pleasant evening; but this must be done quite unobtrusively, so as not to disturb the other guests and break up the party.

In order that the guests may have an idea as to the time at which they are expected to depart, the servant who attends to the door should be told the hour at which carriages may be ordered. If this is not done, the guests may be uncertain as to how long they ought to stay. A dinner-party is rarely a very late entertainment, however, and the rule usually observed is that the visitors should remain in the house about three hours. If the dinner commences at half-past seven, therefore, it will be right to order the carriage for half-past ten. The meal itself occupies most of the time, and shortly after the gentlemen have returned to the drawing-room the guests begin to depart.

At a dinner-party or supper-party the guests are not expected to attend to one another's wants to any great extent, as there are usually a sufficient number of waiters; but in home-life there is much to be done in this way at the family table. At luncheon or breakfast, at those meals at which actual "waiting" is not expected, politeness demands that every person must not alone help himself, but others also, and children should be taught, whilst still young, to be ready and eager to pass plates, dishes, &c., to their parents and one another.

Unless they practise the little politenesses of the table every day at home, they will not perform them when they pay visits, and will be considered ill-mannered and rude.

Visiting.—It is not always possible to entertain friends by means of dinner-parties or supper-parties. People who live at a distance must be invited to spend a short time with their friends. Even intimate friends, who have to come a hundred miles or more, cannot be expected to take the journey for the pleasure of a visit of a few hours' length, and they must be invited for some days at least, if the invitation is to be accepted.

It is a very different thing to see people occasionally, and to live in the same house with them for several days. A week spent in the same house will give more real knowledge of character, than years of casual calling and dining. The little details of daily life bring out the small characteristics, whims, and fancies, and show the individual himself.

Every visitor should realise thoroughly that he or she is under some obligation to the hostess who invites him or her to spend a short time in the house, and that the only way to lighten the obligation is to conform to the habits and customs of the house-

hold, and entirely subordinate any little personal peculiarities. Some visitors seem to forget this, and appear to think that they are conferring a favour by their presence, and that the hostess can only show her gratitude by giving up every minute of her time to them. They only take it as their due if, on leaving, the hostess politely thanks them for the pleasure of their society; forgetting that the trouble and expense have been hers, and to her should be given the thanks.

The first detail which has to be considered with regard to visiting is the invitation, which must be given before the visit takes place. This will, of course, be written in the first person, as it is not usual to ask any one to spend a few days in the same house unless there is more than a formal acquaintanceship between the hostess and the intended visitor.

In England it is, fortunately, considered necessary and polite to state the length of the visit desired. This is certainly more convenient, both to hostess and guest. If the visitor understands that he or she is expected to stay a certain definite time, other engagements can be settled, and the requisite amount of clothing can be brought. The visit will probably be more comfortable and more enjoyable, and neither hostess nor visitor will be wondering when the visit is to terminate. If no definite time is fixed, the hostess feels obliged to press her guest to stay, when perhaps it is very inconvenient to do so; and the guest, anxious to be polite, is afraid of giving offence by leaving, though plans and engagements are being thrown out by the prolonged stay. It is best in every way for both parties if, when the invitation is sent, a certain time is fixed for the visit. It is quite possible when the time of departure draws near, to propose an extended time if desired; but this should not be too strongly pressed.

It is rarely wise to pay a visit unless an invitation has been definitely given. A chance call may be very successful, but a chance visit will in all probability prove a complete failure. The offer of a companion on a long journey, a cheap trip or excursion, may seem opportunities for visiting which should not be missed; but though convenient to the visitor, the time may not at all suit the hostess visited. Half the pleasure of a visit, too, is in the anticipation of it on both sides, and this will be lost if the visitor is so foolish as to risk a visit unasked and unannounced.

If an invitation is accepted, full directions as to trains and other conveyances should be sent by the hostess. A day before the visit commences, the visitor should be careful to state definitely by letter the train and time by which he or she will arrive, and it would be only a kindness to the hostess to mention if a meal will be acceptable, or if dinner or tea will

have been taken during the journey. The hostess, on her part, could state the time at which the family dine, and mention trains which would arrive at a convenient time.

If a conveyance is needed from the station, arrangements should be made by the hostess for this to meet the train. If she herself can meet her visitor, it is all the better. At the end of a journey it is very pleasant to see a friendly face at the station, and to receive a welcoming smile. Whether the hostess is able to be at the station or not, she should certainly be very near the hall-door to receive her guest, and to give a warm welcome.

If the visitor arrive at any time late in the day, a cup of tea is sure to be refreshing and acceptable, especially if dinner is served late. Some slight refreshment will be offered on arrival; but immediately after it the visitor should be allowed to retire for rest, and should be at once shown upstairs to the guest-chamber.

The visitor's room will, of course, have been prepared earlier in the day, and the hostess will have visited it before the arrival of her guest to see that everything is in order. If this is not done, something necessary will have been forgotten; the clean towels, the new piece of soap, or perhaps the vase of pretty flowers which will serve as a special greeting—particularly if it has been arranged by the hostess herself.

There are many little comforts which should be placed in the spare room in preparation for a guest. Pens, ink, paper, and even stamps and post-cards, might be laid close to hand. Needles and cottons might prove acceptable to a lady, though the visitor should provide herself with these necessities. At the same time the room must not suggest too much of a sitting-room, or the visitor will feel obliged to spend a certain amount of time there, and will not feel free to write or read downstairs. Anything which is likely to be wanted by the guest, and which may by its presence save the trouble of an inquiry (a most objectionable thing to many visitors), is better placed in the room than left out of it.

When the guest is shown into the room, he or she should find boxes and wraps already there, uncorded and unstrapped by the servant; and hot water waiting on the washhand-stand. With a few more words of welcome the hostess, having announced the time of the next meal, should leave the guest to wash and dress.

Before saying good night to her visitor the hostess should remember to make arrangements for the next morning—for a hot or cold bath, whichever may be preferred; and the hours for rising and breakfasting should be understood. If the visitor has travelled

any distance, an early hour for retiring will probably be preferred, and the hostess should give opportunity for this to be carried out.

Throughout the visit, as far as is possible, the visitor should endeavour to conform to the ways of the household, and adopt the habits of the family visited. It is wonderful how much can be done towards making the visit a pleasure, or annoyance to the hostess, in this way. If the whole household is upset because the visitor makes engagements which do not fit in with the meal-times, or is so unpunctual that food is spoilt and servants' tempers are ruffled, however agreeable and apologetic that visitor may be, the hostess cannot help rejoicing when the visit is over, and the household has returned to the old routine. Unpunctuality at breakfast is an unpardonable sin in a visitor: it shows want of thought in many ways, and amounts to an act of rudeness. The members of the family feel that they are bound to wait for the visitor before they can commence the meal, and the arrangements of the household are upset.

On the other hand, early rising is almost as objectionable. The sitting-rooms are not ready for the visitor's use at a very early hour, the hostess is not prepared to attend to her guest, and she will be by no means delighted to find on her arrival downstairs that her guest has been down some time before her, inspecting the sweeping and dusting processes which have been going on. If the breakfast-hour is later than the one to which the visitor is accustomed, the time should be spent upstairs in reading or writing in the bedroom, and no appearance should be made until close upon the breakfast-hour. Unless this arrangement is carried out, the hostess is apt to think that the bedroom must be uncomfortable, or that something is wrong; and too early rising shows as great a want of good manners as unpunctuality. Of course this does not apply to gentlemen or young people making early walks or excursions away from the house, and returning in good time and trim for the morning meal.

Besides being punctual and regular in attendance at meals, politeness demands that the guest shall take the food provided at those meals without comment. If coffee is the only beverage on the breakfast-table, then coffee should be taken, even though the usual habit of the guest is to drink tea in the morning. No extra trouble of any kind that can be possibly helped, should be given; and it is quite unpardonable to express any opinion upon the fare provided.

Another way by which visitors can save trouble is by scrupulously putting away all their belongings, and carrying them into their own bedrooms. At

home the visitor is possibly in the habit of leaving needlework in the sitting-room, or the book she may be reading on the drawing-room table: but when she is visiting, she should be most careful to carry her work and book with her when she retires for the night. Many hostesses are greatly annoyed if their efforts to keep the house especially tidy are thwarted at every turn, not by a member of the family, but by the visitor for whom the efforts are made.

Above all, every guest should be particularly careful to avoid leaving valuable articles lying about. Nothing can be more unpleasant to the hostess than for a guest to lose any article of jewellery, however small its value. The servants in the house may be perfectly honest, but it is due to them, and also to the mistress of the house, that nothing should be left lying about. Anything mislaid must cause great annoyance, and such annoyance can be easily saved by a guest who has a small amount of forethought, and who feels it a duty to put everything away after her, and to lock up all jewellery and articles of value. Any loss which may take place during a visit should be looked upon as entirely the fault of the guest, and not of the hostess.

There are many small ways in which a visitor may save trouble, and it is marvellous the difference there is in visitors about these small things. Some come into a house keeping their eyes open, and their thoughts on others; their one idea is how to save trouble, and the family life is only pleasantly disturbed by them; whilst others add to the household work, upset the routine, and finally depart, having given more trouble than pleasure.

Not only may a visitor avoid giving extra work, but in small households a lady may even help in the work. This, however, can only be done by a guest possessing tact and discretion. The help must be unobtrusive, must be offered just at the right time, and in such a way that there cannot be the slightest fear of giving offence. If this can be managed, the result will be that both hostess and guest will feel more at ease.

If there are children in the household, it is a simple matter to take one of them out in the morning, whilst the hostess is occupied with her household duties. If there are not many servants, and the hostess helps with the work herself, an offer to dust a room or arrange flowers may be acceptable. If only the thought is borne in mind, many little ways will suggest themselves; and if the assistance is discreetly offered, the guest will be made happier by feeling that she is making herself useful, and the hostess will be glad of the help.

Some people consider that the height of perfection in the art of entertaining a visitor has been reached if that visitor can be made to feel "quite at home:"

but it is doubtful whether the visitor will altogether enjoy the process. Few people object to a certain amount of attention, and the majority enjoy being made much of. If the guest is really treated as one of the family, this extra attention will not be paid. The result of making a visitor "quite at home" may be that a lady visitor actually feels in the way. If no especial plans are made for her enjoyment, her time will hang heavily on her hands; for she has not the small or large pieces of work connected with the management of the household which occupy her entertainers. She does not know, nor wish to know, the private concerns of the family; and if family affairs are discussed in her presence, she must feel uncomfortable. After all, it can be only a pretence to treat a visitor as one of the family. She cannot behave as such; she does not feel at liberty to read just when she feels inclined, to talk or keep silent at will, to give orders to servants, or to alter the position of furniture in a room. To a certain extent she *must* be treated as a visitor, for she cannot use the house and its belongings as if they were her own.

At the same time too much attention is very trying to anyone. When hostesses act as if they thought that it was their duty to entertain their guest, or provide for that guest's entertainment, every minute during the day, the guest is almost certain to be unhappy. No time will be given the unfortunate visitor for writing a letter, or even resting. One plan will be proposed and carried out after another, and life will become but a "rush" from one entertainment to another. If the hostess herself is unable to be with her guest, one of her children will be sent to take her place, and the visitor will never be allowed to be alone for more than a few minutes at a time. The result will be that when the visit is at an end, the visitor is tired out instead of refreshed.

The hostess must be occupied by her household duties during a certain part of the morning, and she will feel more comfortable if she finds that her guest has found occupation also. If on her return from her work she finds her guest evidently waiting for her, she must be rather disturbed.

At the same time the guest should be ready at any moment to put aside her work or writing, and fall in with any plans the hostess may have made, and no visitor should spend too much time in letter-writing. If she receives letters in the morning, at the breakfast-table, after having asked permission to read them, she should, if possible, interest her hostess in them, and read her little pieces of news from them.

All visitors should be very careful to bring with them all the little extras they may require, so as not in any way to need to borrow or use their hostess's property. It is polite and thoughtful in a hostess to place needles and cotton, paper and pens, in a

guest's room; but it is better that the guest should use those of her own providing. If she should find that she has forgotten any necessary, it is far better to buy than to borrow.

Some people, who possess an abundant store of everything, are very willing to lend stationery, stamps, or articles of clothing; but others are annoyed if they are asked for a loan, and vexed if articles are taken without even the request for the loan being first made.

In the course of a visit there are always a number of small expenses in connection with the various arrangements made for entertainment. In a large town there are sure to be small fares for omnibuses and tramcars, perhaps also railway tickets, if excursions of any kind are made. Unless there is a carriage on the visitor's arrival, there will be a small sum to be paid for the moving of the trunk. All these small expenses should be paid by the guest, and no bills of any kind must be left for the hostess. Occasionally it may seem difficult for the visitor to accomplish this. The host or hostess may insist upon paying, and the guest may feel it is almost rude to refuse. In spite of this difficulty, however, the endeavour should be at least very earnestly made. There are few people who can afford to pay all the little extras for every visitor, and no hostess should be called upon to do so. A shilling here, and a sixpence there, may seem little to a careless visitor, but it may be a consideration to a thrifty hostess. People who keep an exact account of their expenditure may be seriously annoyed by demands being made upon them by other people, even though they are their visitors.

The only way for a visitor to pay all small expenses, is to pay them at the time they are incurred. It is an easy matter to pay the porter when he brings the trunk, to buy a tram-car ticket, or pay an omnibus fare; but it is not so easy to persuade a hostess to take the money afterwards, if she has paid at the time. In regard to one point in particular, if there is any question of a washing-bill, the guest should always pay for it, and it really is more polite of the hostess to allow her to do so, for if she is prevented she does not feel at liberty to incur a second debt of the same kind.

Much has been said from time to time on the question of the payment of servants by visitors. It is often a very perplexing one to the visitor, and cannot be settled by any rule or law, but should be decided by common-sense in each case. In very large houses, where there are many domestic servants, the necessity of feeding each one becomes an intolerable nuisance; and for that reason, in many large establishments the servants are forbidden to accept any gratuities at all.

In small houses, however, a visitor causes additional work for hands which are, perhaps, already fully occupied. A small sum given by the visitor may, in such cases as these, assist the hostess, by making the servants willing to receive visitors, and cheerful in performing the extra work. If a small gift is presented, instead of the money, it may be found even more acceptable. The visitor, in deciding the question, should always consider the wishes of her hostess, and whether the giving of the money will assist her in her household arrangements, or cause her trouble.

The fee would be given to the housemaid in a small house; but in a large one a lady would be expected to give something to the lady's-maid, if she had had need of her services, and a gentleman would be supposed to fee the men-servants.

When the time for the departure of the visitor arrives, the hostess must not forget to "speed the parting guest." Arrangements for the comfort of the journey must not be forgotten; and if it is to be a long one, eatables should be provided. Plenty of time should be allowed for getting to the station; and if a cab or carriage is needed, it should be ordered, so that there will be no hurry. If the hostess is able to see her guest into the train, so much the better; and she should express a wish for another visit soon, and a safe journey.

Before the visitor can consider that everything connected with the visit is over, he or she must write to the hostess to announce safe arrival, and to thank her for the pleasure the visit has given. The letter should if possible be written the day after return, at the very latest.

If the visit has been a long one, the visitor should seize any opportunity possible of repaying the hostess for all the trouble she has taken. If a lady is a skilful needlewoman, a piece of her handiwork might be very acceptable, and would at any rate show that she was grateful. Another way of showing gratitude is for the visitor to be careful not to gossip about the members of the family to whom the visit has been paid. A visitor may, in the course of a long visit, learn facts connected with the family of which the outside world is ignorant; and if the visitor has kindly feeling, and treats his or her friends with respect, the outside world will still remain ignorant.

The Etiquette of Travelling.—Few people nowadays are not obliged more or less frequently to take long railway journeys. Travelling for pleasure is certainly far more common than it used to be, and express trains and comfortable carriages have made business journeys more frequent. In the course of a long journey strangers spend several

hours in one another's company, and impolite and thoughtless people may make themselves and others very uncomfortable in that space of time.

When there is so much travelling, it is not very surprising that there should be certain recognised laws of etiquette in connection with the conduct and behaviour of travellers. It is, perhaps, needless to state that the first of these is, that travellers should behave as politely in a railway carriage as in a drawing-room, and should endeavour to be most courteous in their behaviour to one another. Little annoyances are very fatiguing, and an uncomfortable journey is far more tiring than a comfortable one; but comfort for one person may mean annoyance to another. Everyone cannot have the best place, or a considerable amount of room in a crowded railway train or omnibus, and one must give way to another.

As far as the best seats are concerned, the rule of "first come, first served," is usually followed. If people take the trouble to arrive at the station some time before the train starts, they certainly have a right to choose their seats. A seat is usually considered to be taken if any luggage is placed in it, a hand-bag or bundle of wraps; and it is a breach of etiquette to move any bag so placed, and take possession of the seat in the owner's absence. There is no law which states that a seat taken in this way is private property—that is to say, no law in connection with the railway company; but there is certainly a law of custom and politeness. Anyone who has travelled knows that the corner seats in a railway carriage are the most comfortable; and if people exert themselves to get to the station early to obtain those seats, it ought to be considered sufficient if they leave some piece of luggage to show that the seat is theirs. At the same time one person is only entitled to one seat, and it is unfair to spread luggage over the carriage, if only one seat is required. Before taking a seat on which luggage is placed, inquiries should be made as to whether the seat is engaged; and if it is not, the luggage should be at once moved by its owner; but the luggage should never, under any circumstances, be moved by anyone else.

Although seats taken by luggage being placed on them belong by right to the owner of the luggage, acts of courtesy and kindness may often be done by giving up the seats to older people, or by changing seats with people. Many people greatly prefer to ride facing the direction in which the train is moving; and if it is a matter of indifference to anyone which way he or she rides, with a little thought a kind act may easily be performed.

Ventilation in a railway carriage is often a difficult question. Different people have very different ideas on the subject; and what one considers neces-

sary fresh air, is looked upon by another as an undesirable draught. Common-sense seems to dictate that eight people cannot ride with comfort for any time in a carriage without at least one window open; but not infrequently people will be found to object even to this, on the ground, perhaps, of fear of toothache or neuralgia. They do not seem to consider that they are sacrificing seven people's comfort to their own. The person facing the draught from the window is supposed to be entitled to control its position, but should endeavour to consult the wishes of the other passengers. Politeness demands that others should be considered; and it is rudeness and ill-manners to insist on our own rights, regardless of other people's feelings. Sometimes an exchange of seats will allow all parties to be comfortable.

The numerous conveniences which are now arranged for packing have greatly reduced the number of parcels which people are obliged to carry. If one person has a large number of bundles and parcels, the other people in the carriage must be inconvenienced; and for this reason as few parcels should be taken as possible. Those few should be securely put away under the seat, or properly arranged in the rack, so that they are unlikely to fall on to the other passengers' heads.

The most kindly politeness must be observed by one passenger to another. Any assistance that is possible should be rendered by a gentleman to a lady, or by a young lady to an older one, and the slight assistance should be properly acknowledged. In passing in or out it is easier to request permission to pass than to push, and "thanks" are not difficult to return for any help or politeness. People who are not sitting in a corner seat, very often thoughtlessly stand at the window when they wish to speak to friends on the platform; they should never do so without first asking permission of those seated in the corners.

If the journey is a long one, it is often more convenient to carry food, and eat it in the carriage, than to rely on purchasing it at the stations *en route*. If such a luncheon is to be eaten on the journey, it should be so prepared that it can be taken easily and nicely without offence to other passengers. No fragments should be left about the carriage, and as few crumbs should be made as possible. The meat should be cut up, and convenience provided, if it is not made into sandwiches, so that it can be eaten daintily. Pieces of orange-peel, nut-shells, or egg-shells should be collected in a piece of paper, not scattered on the floor; and they can be thrown out of the window when the meal is finished.

It is always advisable, however, to be careful about throwing anything out of the window of a train in motion. Accidents have happened to men

working on the line, and no bottles should ever be thrown without first looking. Unless care is taken, the pieces may merely go out of one window to go in at another, and annoy other passengers, and care must be taken to avoid all accidents of this kind.

It is not easy to lay down any distinct rule as to whether it is right for one passenger to speak to a fellow-passenger. If the journey is a short one, any remarks beyond those demanded by politeness are quite unnecessary; but on a long journey the case is slightly different. A gentleman may speak to a gentleman he meets in a railway carriage, but he should exercise great discretion how he speaks to ladies, and especially to young ladies travelling alone, as they might be made uncomfortable by his doing so. An elderly or middle-aged lady might also speak to a fellow-passenger, if she felt so inclined; but any conversation in a carriage should be confined to general subjects, and should not include personal topics.

Friends travelling together should be careful not to annoy other passengers by talking loudly; and if they are wise, they will avoid discussing their acquaintances, and mentioning other people's names. In a mixed company of apparent strangers, one person not knowing another, it is most unwise to converse on personal topics. Frequently it turns out that there may be mutual acquaintances present, and remarks may be repeated. A public conveyance of any kind is certainly no place for confidences.

A young lady who is obliged to travel alone must be most careful in her behaviour. She should endeavour to find a carriage in which there are other ladies, and she should not enter into conversation with strangers.

Travellers in any foreign country are most unwise if they assume that their own language is not understood by their fellow-passengers. They should never make any remark, under that assumption, which might cause annoyance; for the probability is, if there are a number of people present, that their remarks are understood by someone.

If a passenger is provided with illustrated papers, &c., he or she may offer them politely to other passengers, if by doing so there is a chance of giving any pleasure.

A change has taken place of late years in the ideas as to the kind of dress which should be worn on a journey. When journeys were longer, because travelling was slower, old clothes were regarded as the only garments suitable for travelling, and people appeared attired shabbily in dresses and shawls and coats which would not have been considered good enough for wear at any other time. Happily such ideas have now entirely passed away, and the travelling-dresses usual to-day are chiefly

characterised by their plainness and neatness. Good well-made clothing is worn, but it should be of a quiet colour, to attract as little attention as possible. Bright colours, and any display of jewellery, are quite out of place in a railway carriage. Decour and clothing should be alike quiet.

In a large city, where the distances are great, there must of necessity be much travelling in omnibuses and tram-cars, and short railway journeys must be frequently taken. Anyone who travels frequently in this way, must occasionally, perhaps very often, have noticed how people seem to forget etiquette and good-breeding directly they enter an omnibus or tram-car.

If it is wet or late, there is much pushing and crowding—one might almost say, fighting—for seats, and every new-comer is treated as an intruder. The laws of politeness certainly demand that if there is a seat in the conveyance unoccupied, those already possessing seats shall move closer together, and make room for the last-comer. Thoughtlessness is usually the cause of such rudeness, but rudeness it certainly is.

The question of gentlemen giving up their seats

to ladies in omnibuses and tram-cars is a very vexed one. Ladies are able very often, and should always try, to prevent any occasion for such a sacrifice. If a conveyance is full, a lady should not enter it, but should wait for another. Should a lady, however, find herself in a full carriage or conveyance, and should a gentleman offer her his seat, she should be most careful to thank him politely for his kindness. Too often a lady will take a seat without even a word of thanks. A young girl should always be ready to give up her seat to an old lady or gentleman, or to a young woman carrying a baby.

In railway trains a lady should always be most careful to avoid smoking-carriages. Ladies occasionally do not see the label "Smoking" if a train is very crowded, and they get flurried; but on no occasions should they knowingly enter a smoking-carriage; it is better to lose a train than to do so.

All the laws of etiquette in connection with small every-day occurrences are only fixed by politeness and kind feeling for others; and, therefore, acts of rudeness on such occasions are quite inexcusable on the plea of ignorance of those laws.

LIGHTING BY GAS AND ELECTRICITY.

THE practice of lighting by coal-gas is about four years older than the present century, when, after much contemplation by learned men, a Mr. Murdoch, a Scotchman who lived in Cornwall, was the first person who successfully distilled gas from coal, and applied it to lighting purposes. He first lit up his own house and offices; and in the following year lit the well-known works of Messrs. Boulton and Watts at Birmingham. London soon followed, for in 1807 Pall Mall was lit with gas; and in 1810 the Gas Light and Coal Company was formed. Even at the present time gas is more generally used for domestic purposes in England than in any other country; probably because of the small area of our land, and the comparative nearness of the coal-fields to every part of it.

The conveniences of gas are manifold; it is so easy to light; so thoroughly out of the way of children; it saves so much labour; and is available for warming and cooking, as well as for lighting. The filling, trimming, and tending of lamps is a considerable item in the work of even a moderate-sized house, and it is all dispensed with where there is gas; besides which, the gas may be used for one or two stoves, which saves grate-cleaning and coal-carrying; and for a cooking-stove, which saves much blackening of kettles and pots.

The price of gas depends very much on the ease with which coal is obtainable, and on the size of the community making use of it. It is said to be cheapest at Leeds, where the price is 1s. 10d. per thousand cubic feet, and dearest at Youghal in Ireland, where it is 12s. per thousand—a price at which one would almost think that burning gas must be the height of extravagance. Some idea of the vast annual consumption of gas in this country may be gathered from the fact that London uses 23,000,000,000 cubic feet, and Liverpool 3,000,000,000.

There can be little doubt that gas, as usually burnt, is the most unhealthy of all artificial illuminants. It dries and heats the air more, in proportion, so that engravers find it necessary sometimes to keep near them a sponge filled with water, to counteract this. A greater evil is that the air becomes so strongly heated above the level of the flame, as to prevent the air already vitiated by breathing from ascending, as it otherwise would do. When we add to this that an average burner consumes as much oxygen as two adult persons in breathing, we need not wonder at the foul and oppressive atmosphere felt in many rooms heated by gas. Add further that considerable quantities of sulphurous vapour are produced by gas, which rapidly destroys leather and gilding; and that

a leakage insufficient to cause smell is capable of producing serious toxic (poisonous) effects; and it will be seen that the faults of gas-lighting are neither few nor small.

Notwithstanding all this, the cheapness and admirable convenience of gas will always make it a favourite. It will be manifest, however, that it becomes all-important to reduce the above grave objections as much as possible, by getting the required illumination out of as little gas as possible. In this respect, much has been accomplished very recently, owing to the competition of the electric light; but a great deal is still to be done, owing to the sheer apathy of the public. Little more than ten years ago it was calculated that on the average the gas burnt produced *less than half* its proper illuminating power, and many burners less than one-third; and even yet two-thirds would probably be a fair average.

The illuminating power of the gas itself is always reckoned by calculating it from a consumption of *five cubic feet per hour*. If in a standard burner—which in London is a Sugg's Argand burning five feet—it gives sixteen candles' light, it is called sixteen-candle gas, which is about London quality. In Scotland, much richer gas is made from cannel-coal, which will give from twenty-two to twenty-six candles.

Gas-Governors.—One great cause of loss and damage is excess and variation of pressure. Most burners require for their best effect a pressure not exceeding that of a half-inch column of water; and some do best with still less. At greater pressure more gas is driven through, and yet the light is less. The companies, however, are unable to drive the gas through their systems with less pressure than one and a half to two inches; and it is easy to see how many burners must be working to waste and injury. Turning off the taps will partially moderate the pressure; but gets neglected, and does not accomplish it properly even when done.

The remedy for this is one of the "governors," of which several good ones are made and sold. In most cases a "governor" will repay its cost, in any ordinary house, within one year, by the saving of gas; to say nothing of other objects secured by it. For governors, and indeed any gas system, to act properly, the pipes should gradually become narrower and narrower as they travel from meter to burner.

What are called governor-burners to some extent answer the purpose of reducing the pressure, but less efficiently. The best governor-burners are generally considered to be those of Parkinson, Peebles, and Sugg.

Ordinary Gas-Burners.—The kinds of burners in common use are the Argand, the fish-tail or union-jet, and the bat-wing.

The *Argand* burns the gas from a ring of small apertures, and as commonly found is one of the worst burners of all; using much gas, with a pale and flickering light. On the other hand, a *good* Argand, with all its parts precisely adjusted, is one of the best; but even a chimney a quarter of an inch too large makes a great difference. The only two good Argands obtainable till lately were the Silber, and Sugg's London, between which there is little to choose, and both of which will give the full duty of the gas, and have some power of adjustment of the gas in the burners themselves, besides the tap. Both will give the full power of sixteen candles, or more, for five feet per hour of London gas.

By using two or more concentric rings of flame, Argand burners are easily constructed of fifty, one hundred, and still higher candle-power. Such are chiefly manufactured by Messrs. Sugg, but are only adapted for public places with ventilation overhead, the heat from them being intense. This is, in fact, the great obstacle to the employment in dwelling-houses of more powerful burners of this class which have lately been constructed, an Argand burner of nearly thirty-candle power (London gas) being procurable for about four shillings. One of the more recent introductions is an Argand of American construction, known as the Royal, in which the flame is spread by a button into a tulip form, resembling that of the petroleum oil-lamps now so popular. This burner will burn the natural gas so common in America, as well as the manufactured product, and the flame is of great power, specimens as sold ranging from thirty candles upwards, with about seven and a half feet of gas. The use of a button in this way is a very old expedient, both in oil and gas Argand burners, but has only lately been systematically pursued, and still remains to be perfected as regards the more ordinary sizes of Argand burners; for the present writer found by experiment that by treating the flame in this way, the light of an ordinary five-feet Silber Argand could be perceptibly increased in power and whitened in colour. The greater *whiteness of the light* is, in fact, the distinguishing feature of all Argand burners which, by reason of a button or spreader, are made to give a tulip-shaped flame.

For Argands of still higher duty, we must resort to the regenerative principle presently described.

"Fish-tail" Burners.—These, also called *union* burners, are formed by two small holes bored in the top of a closed tube so as to incline towards each other; the two jets thus meeting spread into a thin flame across the line of the two holes. The best of those generally accessible are well known in the

trade as Bray's, and such should always be asked for, unless known superior burners, such as Sugg's or Silber's, are specially ordered. We are referring here to ordinary nipple burners. Each Bray's burner is stamped with a figure, which denotes approximately the gas it burns: thus, 3 means three feet per hour. But too great pressure will drive five feet through such a burner.

A very great point in economy of gas is to have burners according to the necessity of the case. Thus, a five-foot burner should be reserved for a sitting-room, or where work has to be done that needs light; whereas for an entry, or to light a passage, a No. 2 Bray would be ample, produce less heat, and do less to blacken the ceiling.

Recently there has been introduced a little addition, which in many cases increases the light from a "union" burner considerably. It consists of a little plate, which by a handle below can be brought on to the flame, the whole fitting by a ring on to the burner itself. It is adjusted by trial, there being one position proper for it; and when the plate is brought into the flame, the effect is usually to widen the latter and increase the light perceptibly. On some of Bray's best burners, with adjusted pressure, we could not find any effect; but the gain is very noticeable in three cases out of four that will occur in practice.

"*Bat-wing*" burners are formed by a thin saw-cut through a bulb on the end of the burner. A common one is one of the worst that can be chosen; a good steatite one is one of the best. On the whole, the best of these also are made by Messrs. Silber, Sugg, and Bray—all of whom supply burners which give nearly the full power of the gas. Sugg's burner has the slit cut with a semi-circular instead of straight bottom, and a flat table below the slit, giving a better shape to the flame. This burner can also be had with a governor that acts very fairly. Taken on the whole, "*bat-wing*" burners are more durable than "unions" or "fish-tails," and can readily be cleaned by passing a slip of writing-paper through the slit.

Self-Lighting Burners.—A very convenient burner for a bedroom has been lately introduced under the name of Kinnear's Self-lighting Burner. The burner itself is an ordinary "*bat-wing*;" but below this is a very small round orifice, allowing a most tiny jet of gas to escape, which is enclosed in a metal vase. When the ordinary burner is turned out, this small jet remains alight, but being enclosed in the small opaque globe is invisible, the room being in darkness. When, however, the gas is turned up, the jet lights the burner above. This simple contrivance may be fitted with any globe or shade, is

very useful for the study or lecture table, as well as for sleeping apartments, and has deservedly come into very extensive use.

Globes and Shades.—"Union" and "*bat-wing*" burners need no chimneys, nor indeed, strictly, any shades; on the contrary, when the flame is entirely enclosed in a globe or shade, the actual loss of light is considerable, amounting with old-fashioned ground glass to over 25 per cent. Such globes have narrow apertures at the bottom, of not much over two inches diameter, and cause considerable flicker of the flame, which itself means loss of light; yet these globes are still very general. It is essential to economy and good light that all such should be swept away.

For light alone, the best globes have large openings at the bottom, of four inches or more, and are made of opal or milk-white glass. The large opening gives a flame perfectly steady and free from flicker, and practically avoids loss of light, as a great deal is radiated directly downwards, and a considerable portion is also reflected from the inner surface of the upper portion of the globe. A naked flame is, however, irritating to a great many eyes, especially after middle age; and most of Mr. Sugg's London Argands are furnished with opal saucers beneath the flame, which mask it completely.

Coloured shades are matters of taste, and can be had at good shops in all possible variety of form and colour; but such are only suitable for drawing-room use.

Recent Improvements in Gas-Lighting.—We have now described the best and most recent forms of the ordinary classes of gas-burners, leaving, of course, street-lamps out of the question. Since about the year 1880, however, very great improvements have been made, and other forms of burners have been invented, which a great deal exceed sixteen-candle power for five cubic feet of London gas. Ventilation also has received special attention.

The most improved high-duty burners are all on what is called the "regenerative" system; by which both the gas and the air are highly heated before combustion, by the heat of the lamp itself. The first successful lamp of this kind was a large Argand by Mr. F. Siemens, which was brought out in 1879; and although this has long been superseded by other patterns, the principle then introduced by Mr. Siemens has more or less affected the whole system of gas-lighting.

The more usual pattern now adopted is what may be called an inverted Argand; the flame coming *down*, and then curling upwards, much like a convolvulus flower. This kind of flame was introduced by Mr.

Grimston; and one of large size is now manufactured by Mr. Siemens, and is said to give ten candles per foot for ten feet of gas. While, however, the Grimston burner curled outwards, the flame of the Siemens circular regenerative burner curls inwards, as shown in Fig. 1. The gas is supplied to the main

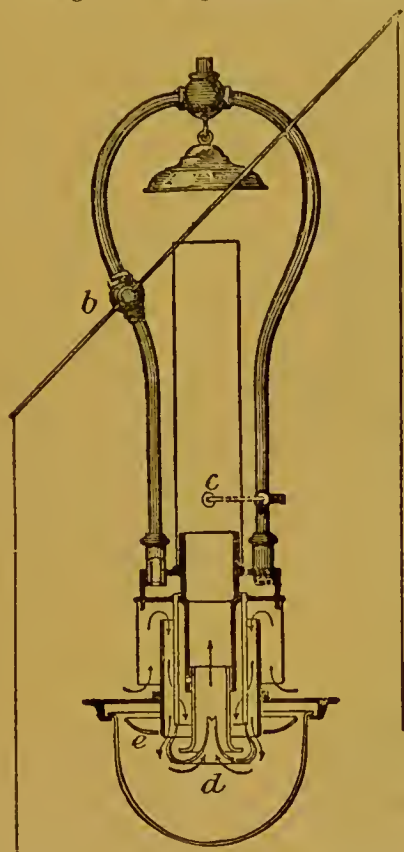


Fig. 1.—SIEMENS' REGENERATIVE BURNER.

burner by the tap *b*, the tap *c* supplying a small flash flame, whose object is to produce a current of air in the lamp, and an upward draught in the chimney. At *d* is a trumpet-mouthed porcelain tube, around which the flame plays downwards, and then upwards, the products of combustion passing upwards through the centre and up the chimney. The arrows show the action of the currents, and explain how the air passes first upwards and then downwards between intensely heated surfaces, so as to be made very hot before mingling with the gas.

Mr. Siemens has also constructed a flat-flame regenerative burner for a smaller consumption of gas, averaging, say, seven feet per hour. In this lamp an ordinary flat-flame bat-wing burner is so placed as to give a *horizontal* flame, over which are perforated porcelain plates, through which highly heated air is allowed to enter to feed it. This simple burner may be said to give about double the usual candle-power; but some minor difficulties hardly appear to be quite overcome in it, and the method

seems only suitable for lamps of the form of an over-head pendant.

One of the best known and most popular of the regenerative class of burners is the Wenham, which gives about twenty-one candles with four feet of gas; while slightly over ten feet will give 120 candles (with cannel-gas the consumption is thirty per cent. less). In this lamp the flame comes from the centre and curls outwards as it ascends. In the standard patterns the issuing apertures are attached, as in other regenerative lamps, to the lower surface of the burner itself; but the small-sized Wenham burner is also made as in Fig. 2, to screw on any ordinary gas-fitting. To attain this object, the gas-supply part of the burner is detached and brought from below, as seen in the figure. This form of the Wenham burner can be purchased for twenty shillings, and when mounted on a pillar makes a most excellent reading or working lamp, while it can also be used in a hall, or in any ordinary gaselier, without altering any of the other fittings.

Another lamp introduced from Germany is known as the "Meteor," and differs from the preceding in that the flame starts from the outside of the circle and curls round into an *inside* flue, very much as in the Siemens lamp. Sugg's "Cromartie" is also a good regenerative lamp, and another has quite recently been introduced as the "Fourness" lamp.

It is impossible to say which is absolutely the best of these lamps. The prospectus of each will be found to throw the others into the shade as regards duty, though all far surpass the London Argands. All of them, if supplied too freely with gas—or "over-gased," as it is called—may deposit soot; and therefore a governor is part of the apparatus. In this particular the "Meteor" is, at present, probably superior to the others. This lamp, however, is not made of less size than 100 candles; costing, in the plainest style, £3 6s., and generally speaking, it may be said that two or three low-power lamps, though less economical, light rooms in private houses practically better than a single lamp of higher total power. This is, at present, an advantage of the Siemens flat-flame and Wenham burners, the small size of the latter making it also available as a standard or reading-lamp. The "Meteor" appears to us to give rather a yellowish flame, the whitest belonging probably to the burners of Messrs. Siemens and Sugg.

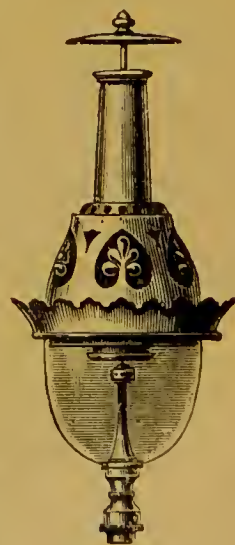


Fig. 2.

All these lamps are, however, so recent that they may probably be equalised before long as regards many of such details; and it will be seen that all of them greatly surpass the performance of the older systems.

The regenerative principle has also been applied in some degree to the ordinary or non-inverted Argand burner. Mr. Siemens has an improved Argand which is stated to give 4.33 candles per foot with six feet of gas; whereas with a standard London Argand, sixteen candles per five feet is only 3.20 candles per foot. In this burner the button principle is slightly applied, but only to the extent of bulging the flame somewhat in the middle; and the burner is so skilfully constructed, that in spite of the great heat of the flame, the bottom of the chimney remains cool. A burner we examined, which was using nine feet of gas per hour, gave a light of fully forty-two candles, the flame being wonderfully white in quality. The smaller size did not give such high duty, but is far more convenient for general purposes. This burner struck us as somewhat of the Silber type, but carrying the subdivision of the air into concentric shells very much farther, and it may be strongly recommended as giving great light, with economy of gas and perfect simplicity, for all places where the heat of an Argand can be carried away, or is no objection.

Another Argand burner recently introduced from the Continent is known as the Bee-Cardinal; its peculiarity also being that it uses *hot air*, made hot by the lamp itself. In this burner it is very simply done. The lower part of the chimney itself consists of wire gauze, through which alone air reaches the flame; the bottom of the burner, usually open in Argands, being closed. A sort of vase goes outside the chimney, and rests below the gauze; and the lamp is, therefore, fed solely by air which has passed down between the intensely heated chimney and the outer vase, which also becomes rapidly hot. The gain when the vase is put on is perceptible; but we have had no opportunity of comparing this burner directly with the best English Argands of Silber or Sugg, and it certainly does not give nearly such high duty as the Siemens Argand burner. It may,

however, be hoped, and is greatly to be desired, that further progress will be made in applying the regenerative principle to, and getting higher duty from, Argand burners of the more ordinary form.

Lamps and Ventilation.—As all regenerative lamps deliver the products of combustion at the *top* of a chimney or flue, they lend themselves particularly well to ceiling ventilation, if only a flue can be provided from the latter to any exit. The general method is shown in Fig. 3, which gives a section of a Wenham lamp thus ventilated, with provision for the other foul air of the room.

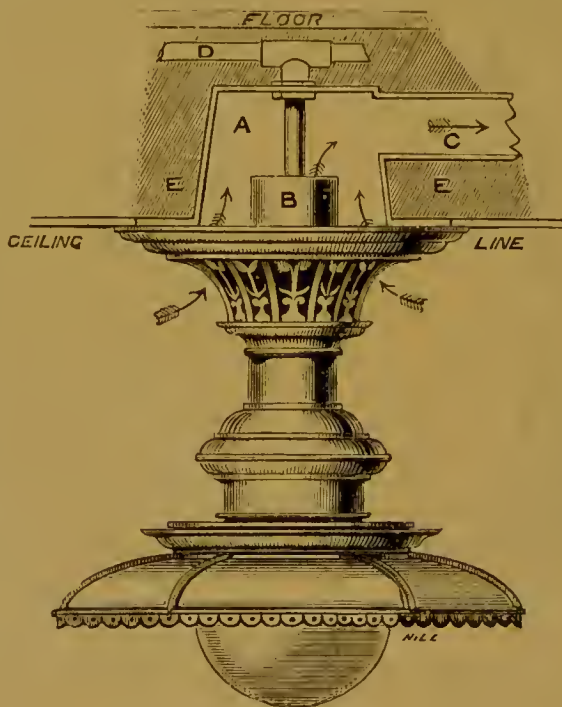


Fig. 3.—VENTILATING WENHAM LAMP.

A is an iron chamber between the ceiling and floor above, surrounded by a packing, E, of silicated cotton, or other non-conducting material; n is the top of the chimney delivering the burnt gas and hot air; n, the gas-supply; c, an iron flue-pipe carrying the foul air away. The air of the room enters around, as shown by the arrows. It rarely answers to carry the flue into the open air; it should if possible be taken into a chimney with a good up-draught, unless the house is furnished with a ventilating shaft, carried well up, into which all such pipes can be taken—a happy state of things which may perhaps

one day be general. It must further be seen that the non-conducting material round the hot-air chamber and flue is sufficient, and proved to be so by actual testing. Without this obvious precaution, it is almost needless to say that the risk of fire would be very great. We have known such a case actually happen, but it must be put down to gross carelessness, and there need be no risk about the system if properly carried out.

Argand lamps are often ventilated in a very similar way, as in the globe lamp of Mr. Hammond, and the Grosvenor Argand of Mr. Sugg. Lamps thus ventilated make a wonderful difference in the air of a room, and are most efficient aids to its general ventilation. But there is one condition that is essential to this, for want of which disappointment has occurred with the Wenham lamp on more than one occasion. There must be sufficient *inlet* for fresh air into the room to supply not only the lamp, which

will probably draw off approximately 5,000 cubic feet per hour, but also the draught up the chimney. If it is not sufficient for this, a great part of the lamp-flue will be converted, according to the principle explained on p. 102, into a *down-draught flue*, positively drawing back burnt gas and foul air into the room, depositing soot, and destroying the illuminating power of the burner. A Tobin tube will prevent any difficulty of this kind in most cases.

A very simple and efficient ventilating gas-bracket, extremely suitable for drawing-rooms, or wherever lights near the walls are convenient, has been patented by Dr. Griffiths, and is shown in Fig. 4. The ornamental shade itself is in two pieces, fixed separately and a short distance apart. Air to feed the flame is drawn in over the edge of the basin, or lower part, whilst the upper part collects the burnt and heated products, and carries them off through a metal pipe embedded in the wall, until it can reach a chimney or other ventilating outlet. Any burner can be used in these brackets, which are made with bevelled mirrors and other decorated backs to suit various apartments. With a few of such brackets round the walls, a reception-room could be most brilliantly lighted, yet with a total absence of heat or oppression, so far as the gas was concerned. This device is peculiarly suitable for large rooms, and for the high-power Argand burners which have been described.

Incandescent Gas-Burners.—When gas is first mixed with air, and so burnt, the light nearly disappears, but the heat is increased; all the particles of carbon being burnt at once, instead of being first made incandescent in the flame. If we introduce into this extra-hot flame any solid substances of small bulk which are readily made incandescent, we shall get light from these. This is the principle of several lamps recently introduced. The Clamond burner was surmounted by a thimble-shaped net-

work of magnesia, spun from paste and then dried; the magnesia radiating the light from its white-hot surface. Another burner used platinum wire. The only one which has survived is the Welsbach burner, in which a tube or mantle of white gauze is suspended in the flame; this gauze being formed of several of the rare earths, and being made by

saturating actual muslin with salts of the earths, which remain when the gauze foundation is burnt away. The mineral gauze left is, of course, very fragile; and the burner has, in consequence, to be carefully treated. The Clamond magnesia basket was not so delicate in this respect, but was certainly not equal in light for the same quantity of gas—owing partly to the greater space between the incandescent threads, which resembled a grating, and partly to the fact that magnesia is less luminous than the earths used in Welsbach mantles.

Since the first edition of this work, the Welsbach incandescent burner has been greatly improved by the discovery of better preparations of mineral earths, which are more luminous and not so fragile. They still need care, and should be guarded against jolting; but the mantles will now bear lighting at the top in the ordinary way. The luminosity has been so greatly increased, that whereas they were formerly stated to give 22 candles light with $2\frac{1}{2}$ feet of

gas per hour, the two sizes now made are said to give 35 candles for $2\frac{1}{2}$ feet of gas, and 55 candles for $3\frac{1}{2}$ feet per hour, the price of the burners being 6s. 6d., and of mantles for renewal 1s. 3d. each. We have not been able to establish quite so much light as this with burners purchased in ordinary course, as against standard Sugg Argands, but even with some discount, the gains in light and economy are considerable, and the light is particularly pleasant and agreeable.

Enriched Gas.—Under such names as the "Albo-Carbon Light," the "Wallis-Ratcliff," and others, a system has been introduced of enriching

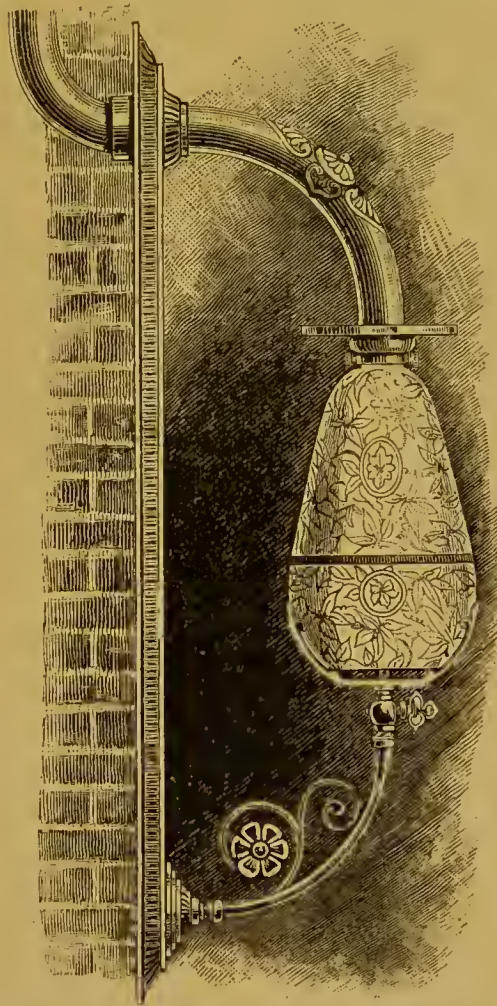


Fig. 4.—GRIFFITHS' VENTILATING GAS BRACKET.

ordinary gas by the vapour of carbon compounds. The gas is sometimes passed through a large carburettor filled with one of the fluid hydrocarbons, of which there are many; and we have had favourable experience of this plan in large workrooms. But the systems above named use the *solid* hydro-carbon known as naphthalin, lumps of which are placed in a metal reservoir so connected with the burner as to be warmed by the flame, when the substance is melted and vapour driven off. The fittings are not expensive; and, after paying for the naphthalin, there is an economy of somewhere about 30 per cent. This system is, however, only applicable to the smaller sizes of "union" burners or "bat-wings," *small* apertures being essential; with large ones (as in Argands) the burners smoke. A Bray's No. 3 burner with this apparatus is fully equal in light to a No. 5 without. When first introduced, the system could scarcely be used in private houses, on account of the stench from the naphthalin when turned off; but this has been in at least great measure overcome, and it is a distinctly economical method of lighting, besides giving a whiter light.

Gaseliers and Fittings.—Such are the more recent improvements in gas-lighting, and it only remains to make a few remarks upon fittings generally. Of meters, dry should always be preferred to wet ones, and the size chosen with judgment—rather under than over size, but not much so. Counting the number of lights that will be burning at once (not forgetting the gas-stove, if one is used, and reckoning its gas consumption as 5 feet for one light), the nearest meter may be chosen to about 20 per cent. less, a meter being always made for so many "lights."

The pipes are best of iron, and provision should be made against the water that collects in them, and which might freeze in winter. To avoid this, a draw-off nozzle, closed at the bottom end by a screw-plug or otherwise, and called a "siphon," is fixed at the lowest point of the pipes; and whenever frost threatens, the water should be run off. If the meter and supply are in a coal-cellar, as is so usual, a small jet kept burning there will often prevent any trouble with either gas or water.

Gaseliers must be attended to by being greased and filled with water occasionally. They should always be pulled down or let up steadily, not rapidly; and in low rooms, where the lights must be near the ceiling, this should always be protected by bells or mica covers. It is not only smoke, but heat, that has to be guarded against. However many lights there may be in a gaselier, no more should be

used than are necessary, less for economy than for sanitary reasons.

Other fittings will be selected according to taste and convenience; but it may be mentioned that where gas is fitted in a bedroom, there should either be a light on *each* side of the dressing-glass, or the single one should be capable of being brought to the exact centre, as it may be very important at times to see the face or figure *equally* lighted on both sides.

Finally, the greatest care should be taken about escapes, remembering what has already been said as to their deleterious effects. A *small* escape may be sought with a light; but any more serious one should be smelt out by the nose, if possible. Taps, in particular, are always liable to work loose; and when this happens, the seat of the washer on the small end of the plug may have to be filed down a little farther, when all can be tightened up with a screw-driver.

The Electric Light.—Electric lighting is, no doubt, destined in the near future, more or less, to supersede gas, as completely as gas, early in this century, superseded candles and fishy oils. The electric light, in isolated buildings, has been successful for some years, because it has been produced by machinery placed on or near the premises; and the difficulty which long baffled the electrician was how to distribute the light from central stations, as gas is circulated all over large areas from more or less distant gasworks.

Light is produced wherever electricity is forced along a conductor which resists its passage, or is not sufficient to convey the quantity of electricity without great resistance, causing friction, heat, and light. The arc light is caused by the passage of the electric current across the space between two pieces of carbon; the points of which are raised by the current to a white heat. The ordinary incandescent light is caused by forcing a current along a carbon filament, which is not sufficient to carry the quantity of the current without great resistance. This resistance causes the filament first to become red-hot, and then to glow with a bright white light. The morsel of carbon would be instantaneously burnt up, but that the air has been exhausted from the small glass globe in which it is placed; by which means a vacuum is formed, and combustion prevented, so that the filament will glow brightly for a thousand hours or more, and still be unconsumed.

It is evident that the wires conveying the electric current can far more easily be conveyed into houses than gas-pipes, because they can be conveyed along walls, or even between floors and ceilings, by means of very small apertures; and they can also be fixed at any convenient place on the walls, and

conveyed, in the same manner as telegraph-wires, to any point where they are wanted. In some of the systems lately introduced this is done on the principle of induction apparatus or secondary generators. Thus, a primary electric current, at high pressure, is conveyed along a wire main laid along the street, and carrying a current of prodigious tension; and in as many places as the light is required along the course of this primary conductor, a secondary generator or coil is arranged, capable of carrying off a current of larger comparative quantity and lower pressure, in order to supply a certain number of lamps of any of the various kinds that have been invented for the electric light. In other cases the current is used direct, or from what are called secondary or storage batteries.

Another mode of electric lighting, only suitable to private houses on special occasions, such as a ball in a marquee or temporary building, is the system of lighting by primary batteries. No machinery of any kind is required to generate the light; but the electric current is produced by a properly proportioned solution in which carbon and zinc plates are immersed, and the light is at once ready for use. Many kinds of batteries are adapted to these portable lights, and there are various ways of using them. Sometimes a small battery serves as stand for a single small lamp; sometimes the batteries are put in the basement, and the installation all over the house connected with them. This method of producing a temporary light is exceedingly costly, however; and the hire of an adequate number of what are called "storage cells" is more usual.

The arc light is not universally becoming to colours or complexions; but much can be done by the use of tinted glasses; and ladies will have to choose the colours of their evening dresses with a special view to the electric light when it becomes general. It is said that at present nothing looks so well under its influence as pink, and the various shades of red. Incandescent lamps are usually pleasant enough.

The proportion of heat given off by electric lights is about one-twentieth of the heat given off by gas, for the same amount of illumination: so it is much cooler. The danger of fire is much diminished by the use of electricity. The incandescent lamp may be ever so near to curtains or hangings, but they will not catch fire; matches and tapers are never required, as a small switch turns the light on or off; and there is no danger of explosion. Then the electric light does not destroy the most elaborate gilding; it does not promote or produce dirt in any way; and thus a certain amount of economy follows its reign. So much bearing have these peculiarities upon the real cost of lighting,

that many people consider the electric light is even now scarcely dearer than gas, where it can be laid on. But though no more startling discoveries are now to be expected in this branch of practical science, every year makes the electric light a shade cheaper, by the avoidance of little wastes and leakages, which secure a slightly higher percentage of duty for the power expended. Many of the dynamo-electric machines, for instance, looked at casually, appear nearly the same as those made under the same name ten years before. In broad outlines they are the same; but every machine, nevertheless, shows many little constructional differences, which in one way or another produce a better return; and all this is tantamount to some reduction in the cost of lighting.

The lamps also are improved. Incandescent lamps—the domestic lamps, as they may be considered—are less costly while more durable; and electricians know better how to work them. Arc lamps are now made perfectly steady, so that they will not give a "blink" for hours; whilst only a few years ago the constant flicker of these lamps was notorious. Their colour is also improved; the unpleasant violet of years ago being never seen now, except in a few of the older installations. All the way round, in fact, the problem of electric lighting has now begun to assume a practical shape. Progress in the United Kingdom has been, undoubtedly, much retarded by the terms of the first Electric Lighting Act. At that time the public were aroused by the vast claims for indemnity put forward on behalf of the London Water Companies, which it was proposed to purchase on behalf of the City authorities. The sums demanded for these gigantic monopolies, under what appeared to be legal rights, fairly terrified people; and when the Electric Lighting Act was passed, the main feature embodied in it was the strong determination of Parliament that no such vested interest in monopoly should be allowed to arise again. Hence it was provided that if a company had obtained powers to light a district, the local authority might claim and take possession at the end of twenty-one years, with no sum to pay for goodwill, but simply on paying the actual cash value or cost of the works and materials. Electric plant being very costly, and the whole business being then (and still) largely in the experimental or unperfected stage, no company found it worth while to enter into the business on any large scale, with the prospect of confiscation just when success had been attained and before any great profit could be expected. Hence it came to pass that this country was even behind all others in practical electrical lighting, though most of the inventions and improvements were made by British subjects. The whole enterprise

was brought in fact to a deadlock, and it was soon seen that Parliament had gone much too far towards the other extreme. At length the Amending Act of 1889 was passed, under which companies were allowed double the period, or forty-two years, before their property could be claimed by public bodies; and the immediate result was a burst of activity. At the time these lines are written, the metropolis has already been parcelled out into districts, which have been allotted to various companies under regulations fixed by the Board of Trade; and active steps have been taken to push on practical operations, with some prospect that London may soon be the best electrically lighted city in the world. Similar activity is being shown in other large towns, contracts having already been taken in many places for the supply of the new method of illumination.

The chief question which at present is regarded as open, or awaiting practical decision, concerns the choice between the two methods of supplying the current for domestic use, which have already been alluded to. The greater part of London has been allotted to a company which proposes to use the system of induction, or secondary generators. This may perhaps be thought to decide the matter; but such is by no means the case, and some skilled electricians regard the ultimate upshot of the experiment with very grave anxiety. This system depends upon the fact that if a current is sent alternately along a wire, which we will call the main wire—that is, if the current be *reversed* in direction at short intervals, perhaps many times in a second—and another wire be arranged parallel with this main wire, but not touching or having any other direct connection with it, at every reversal of the current in the main wire, a current is “induced” along the secondary wire. On this system the consumers are supplied by secondary wires as required, and matters are easily so arranged that currents either at higher or lower pressure are taken off. So far all is very convenient. But, in the first place, for a main wire thus to supply a large circuit, its current must be of enormous tension, such as would be fatal to a human being; and in the second place, the *alternating*

currents, which are a necessity of the system, are many times more painful and dangerous, if accidentally taken through the body, than a steady or continuous current of the same tension. For instance, if a current of the quantity and tension sufficient to supply a single arc light, such as a scientific lecturer uses in an electric lantern to demonstrate before an audience, were by any inadvertence taken through his hands, if it be a continuous current he would simply take a small shock and think no more of it; but were it an alternating current of the same measurement, the effects of even such a current would be painful, and might give perceptible shock to the system. Of course, the company which is now working a large part of the metropolis on this plan have taken the most sedulous care that the high current is most carefully insulated, and guard in every way possible against accidents which might cause either death or fire. But it remains to be seen how far accidents may practically occur, even in spite of such precautions. Mr. W. H. Preece, in a somewhat flippant speech at the 1889 meeting of the British Association, stated to the effect, not only that there was no danger, but that it was practically “impossible” to kill people by the electric current. It is difficult to understand such a statement in the face of many instances to the contrary; and altogether we cannot but regret, with many experienced electricians, that such immense districts should, at such an early stage, and with such limited experience, have been handed over bodily to a system which yet has to make good its claim to public confidence. A very few fatal accidents have produced a wide public impression as to the dangers of electric lighting, from which systems dependent upon moderate pressure and continuous currents are entirely free. A little longer time will, however, set most of these questions at rest; while, of course, *absolute* freedom from accident cannot be expected in electric lighting, any more than with lamps or gas. It cannot be very long before dwellers in most large towns will be enabled at a very moderate cost to enjoy a system of lighting which in health, cleanliness, and steadiness of illumination offers so many advantages.

THE CARE OF BOOKS AND PICTURES.

To buy books and pictures is one thing, and to take care of them intelligently is quite another. Each hobby is costly, but probably the people who have to be extremely careful in their housekeeping and personal expenses, before they can afford a much-desired book of reference, or a complete edition of their favourite poet, or an engraving of a popular picture,

enjoy and prize them a great deal more than if they had bought lavishly out of their abundance, or if such had “come to them” without any trouble of theirs, as such things do come to reviewers, journalists, and people more or less connected with literary production. There are individuals—and among the educated classes, too—who *never read*;

who are occupied with their business, their housekeeping, the care of the family, and the requisite sewing, to the utter exclusion of any idea of amusing themselves with, or taking any interest in, books, papers, or magazines. Persons of the same class of mind, when removed by wealth and station from household cares, generally go in for one incessant round of gaiety and amusement, and become unutterably dull if illness or other circumstances compel them to live "quietly." These are the kind of folks who set up housekeeping with no more books between them than their respective Bibles and Prayer-books. There are others who have some little liking for "light literature," but, instead of investing money in books, subscribe to a good library, and obtain all that they care for. Professor Ruskin says very unkind things of those who are willing to turn over the pages that other people have turned before them, and have no pride of book-possession; but, after all, one gets a good deal of reading out of a library subscription (and not necessarily all novels), where it would be the height of imprudence to buy books, not only on account of the actual first cost, but also because of the difficulty, in this age of removals, of carrying them from place to place.

Bookcases.—One of the things much to be considered in furnishing a house, is whether the inhabitants are bookishly inclined. If they are, volumes are sure to accumulate in one way or another; and perhaps there are no pieces of furniture so expensive to buy, or so cumbrous to remove, as bookcases. The height of rooms differs; and the bookcases that were most useful in one house cannot be accommodated in another. This, of course, does not hold good of the many pretty dwarf bookcases that may be found at good shops, or may sometimes be picked up at sales, or met with at brokers' shops. There is no piece of furniture that more requires to be substantial, for the weight of books alone makes it necessary that the receptacles for them should be strong.

Valuable books in a town must be preserved by glass from dust and dirt, unless they can be taken from their places at least once a week, and carefully dusted. Modern bookcases are usually made with the glass firmly fixed in with putty, but there are some still to be found in which the glass is leaded and removable, each "light" being merely kept in place by small brass buttons. Great care is required in fixing these, and seeing from time to time that they are in position; or else some fine day when the bookcase is opened, the heavy piece of leaded glass comes tumbling on the head of the opener.

Glass is liable to be broken, and a glazed bookcase cracked and starred is very unsightly. The only

way of guarding against this is to cover the glass with a network of brass wire, which is rather ornamental than otherwise. In these days, however, it is not very often seen.

It is desirable to preserve valuable books from soiling or any other kind of defacement, and also from marauders. Handsomely bound books are very often temptations to servants and others, who see in them the means of obtaining a few pence or shillings, as the case may be; and second-hand bookshops would not be as well supplied as they are, nor could they afford to sell at such low prices as they do, unless directly or indirectly they were reinforced in this manner. The only safeguard is to keep bookcases locked, unless they are in such constant use that any volume would be missed directly.

Very nice dwarf library bookcases, with movable shelves with stamped leather at the edge of each, are made in oak, mahogany, or even deal or pitch-pine, stained and varnished. They are raised a few inches from the ground, which not only facilitates getting out the books that may be in the bottom row, but protects them from damp, and from strokes of the broom. The tops of these dwarf bookcases are also most useful for various small articles, and they can be made with glass doors if necessary. These cases, with a little pottery or other *bric-à-brac* on the top, while accommodating many volumes, can be used so as to add nearly as much as cabinets to the furnishing of the room.

Hanging Shelves.—Small sets of shelves, provided with small holes through which nails can be driven, are particularly suitable for bedrooms, especially for those of young people, where each likes to keep his or her special books and treasures; a habit that adds much to the snugness and homishness of an apartment, though stern disciplinarians, who consider that a bedroom is exclusively to sleep in, look askance at the mere notion of having books there. A very good pattern can be got for about 10s., but is to be met with cheaper, or may easily be made at home by any member of the family with a taste for carpentering. The medicine-cupboard shown on page 69 gives the conveniences of a small cupboard with a bookshelf, and the price generally varies from 12s. 6d. to £1 1s., according to the wood and workmanship.

Revolving Bookcases.—These are American inventions, turning on a central pivot, and are most useful for an invalid who cannot rise from chair or couch, yet with a touch can turn round this receptacle for a good many books, so as to get at any of them. Still more valuable are they for the Christian minister, or busy writer, who continually wants to refer to a book. Quite a little library of reference

can be accommodated on shelves of this kind; and instead of getting up for first one book and then another, it saves a great deal of time to have them within easy reach, and be able conveniently to put each one back, when its purpose is served, without encumbering desk or writing-table. These revolving bookcases are now made in all sizes, from such an one as is shown in Fig. 1, and which is drawn from one in a London theological author's study, down to quite small ones, which are often placed about a drawing-room.

Bookshelves. —

The best way of accommodating books in an ordinary household, where it is desirable not to spend too much money, is by fitting up the recesses in sitting-rooms, or in any one room specially devoted to study, with shelves, supported by rests fixed to the wall, so that the shelves themselves are removable. If brought only to the height of the chimney-piece, or below, if it happens to be a high one, and a top board laid on and stained, or covered with cloth, it forms a sort of additional sideboard, a most convenient resting-place for ink-stand, biscuit-box, liqueur-stand, a potted plant or two, pottery, and many other unconsidered trifles that make rooms look homelike and pleasant, but which too often are absent because there is nowhere to stand them. In case of removal these shelves and the rests can all be carried away and fitted up elsewhere. The best way of preserving the books thus arranged is by nailing stamped leather (sold for the purpose) with gilt fancy nails on the edge of each shelf; or in these days the fancy borderings made for mantel-boards, which are very cheap, answer the same purpose, and admit of being renewed from time to time when shabby. A capital plan, if this last is used, is to place one shelf very

near the top board, so that the bordering entirely covers the space between, which thus becomes a famous receptacle for children's lesson-books, copy and exercise books, loose magazines, &c. When shelves and rests of this kind are removed, the recess walls can be re-papered, and the room does not present to the next comer the unpleasantly bare appearance of empty shelves.

It is very much better if the shelves can be adjusted

at pleasure for books of different sizes, and there are two methods in general use for both shelves and framed bookcases, which accomplish this object. The first is shown in Fig. 2. Each end of the bookcase, or of the recess if shelves are erected, is lined with a board in which are bored two perpendicular rows of holes exactly the same size, arranged in pairs of the same height, at regular intervals—say, every $2\frac{1}{2}$ inches. Into these holes pegs or studs, *s.*, of rather hard wood, made with plain cylindrical heads, and rather smaller cylindrical necks, fit tightly, and can be jammed with a twist of the finger and thumb. On a pair of these studs,

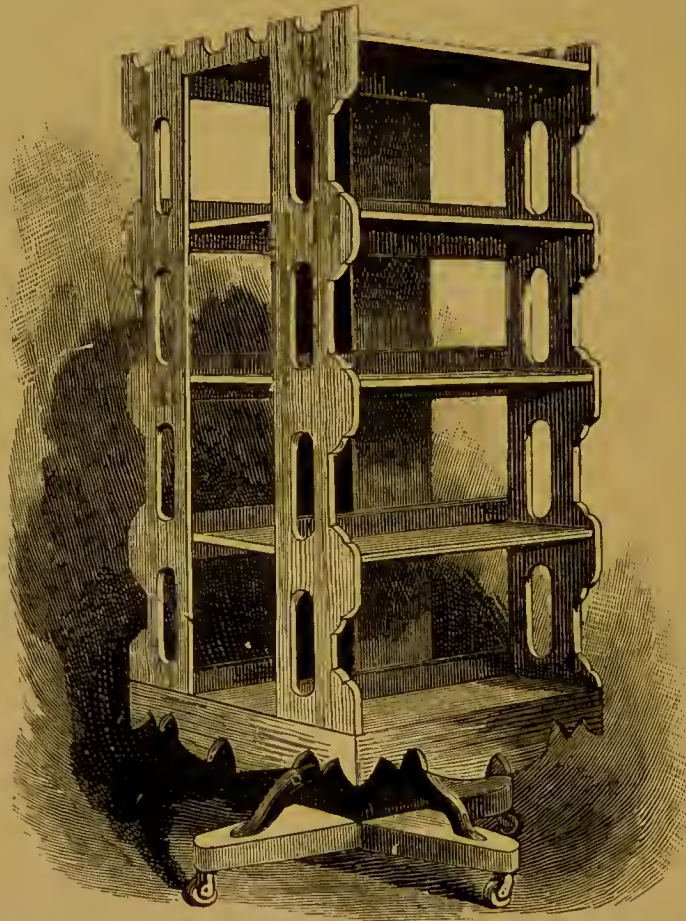


Fig. 1.—REVOLVING BOOKSHELVES.

holes desired, one end of each shelf rests. This is a very common plan, and it supports quite firmly even large and heavy books, its only defect being that if the pegs are moved about much, they gradually work loose and then drop out.

The other plan is shown in Fig. 3. Each end of the bookcase or recess is fitted with two perpendicular strips of wood, at the front and back, cut out in notches as shown in the figure, which gives an inside view of a piece of the end. Into any pair of these notches fit short movable pieces of wood, *A B*, *A B*, and on these, placed wherever desired, rest the ends of the shelves, *C D*. This is a very usual plan, and is very solid and safe. Its only defect is that

the end of the shelf must have the corners cut out, so that it may project into the space between the two notched strips; the shelves therefore have to be all adjusted before any books are placed on them, as they can only be introduced by tipping up one end considerably, which requires room in the bookcase to do.

Halls and passages often contain small spaces and recesses that can be very well filled up in this way with plain shelves, to the exact height to contain bound-up volumes of illustrated papers, gardening magazines, and so forth—

books which are handy to refer to, and easier for some members of the household to get at for that purpose when required, than if they were in a sitting-room occupied by the family. Books arranged after this fashion go a long way towards furnishing a house.

Lending Books.—The owners of books are frequently inclined to denounce the habit of lending, because, too often, those who borrow forget to return. The borrowed book is often put away for safety; out of sight is out of mind; and then comes a day of change or removal, and the volume goes further and further away from its proper owner, who ultimately loses trace of it, and perhaps does not remember, till it is too late, to whom he lent it. People who lend books much would do well to keep a regular register, as the library people do; it would prevent many losses. People who lend at all may find it useful at least to keep a small china tablet hanging somewhere, on which the name of any lent book can be put down, and wiped off when returned. It is so easy to forget one has a borrowed book in one's possession, that it is no use blaming the "conscience" of people in these matters, as some have done. They simply forget; nay, even the owner too often does not remember; and if so, how can he expect the borrower to do so?

Preservation of Books.—Turning down a leaf, either at the corner, or folding it in half lengthways, is a most destructive and ruinous habit, and one never practised by any real lover of books *qua*

books. The creases never come out, and the appearance of the volume is spoiled. If a mark be necessary, a slip of paper, or piece of ribbon or tape, should be put in the place; and for purposes of reference it is wise to use slips of paper with the

number of the page and the subject jotted down on the upper and projecting portion in pencil. In ordinary reading, it is a peculiar class of mind that cannot find the place where it left off without putting in a mark, or making a note of the number of the page; but one or two such are pretty sure to

be found in a family. Scribbling, or making marginal notes in books, is also to be avoided, as a rule; though, in some serious literary work, they are useful and therefore justifiable, to the extent that a book may even be bought for the express purpose of being used and noted in this manner. No one, however, appreciates such notes but the writer, unless in extreme cases where the book belongs to a man of mark, whose comments may have a value of their own. Again, a parent who knows or believes some important passage to be seriously wrong in fact or argument on some important subject, in a book he nevertheless wishes his son to read, may be amply justified in inserting the qualification or correction. But it is bad taste, and destroys property, to append marginal notes in a general way, or without solid reason.

Everyone who ever borrows a book ought to cover it with paper, so as to preserve the binding from soil; and a popular book, which everyone in the house wants to read almost at once, is the better for having a paper cover put on till the operation is over.

There is one class of book which it is very desirable to cover—viz., the school-books of the olive-branches. Modern systems of education change very frequently, and examiners set questions first from one set of books and then from another, so that school-books do not now serve successive generations of children, nor are they bound in a manner that will keep them together for long service; but there always are books that it is desirable to keep whole and take care of, such as classics, French and German and other grammars and dictionaries, the famous "History of

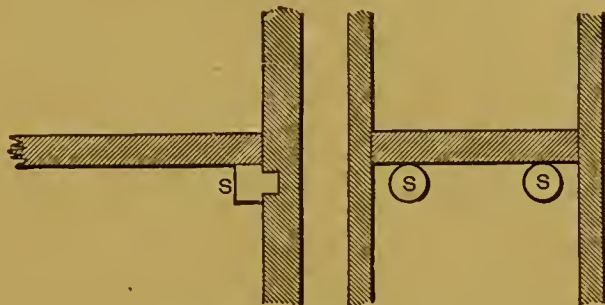


Fig. 2.—SHELF ON STUDS.

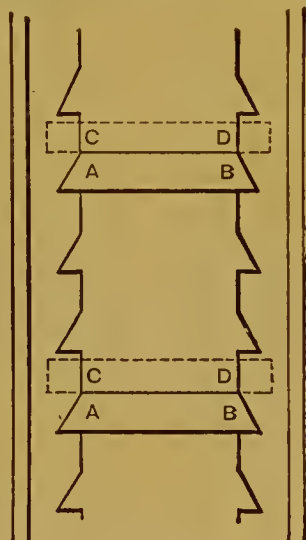


Fig. 3.

the English People," &c. Brown paper suffices for the cheaper and smaller books, but the standard works, or those which are likely to be regarded as standards for a few years at least, should have something more substantial. Black holland is very good for the purpose, cut a little larger than the book, turned in carefully over the binding of the back, and then drawn with long stitches of strong thread across the inside of the lids. Another way, and one only worth while for these standard books, is to cut a piece of American cloth about half an inch larger in every direction than the book when opened in the middle and laid as flat as it will go. The only exception should be at the sides, where a couple of inches extra may be allowed. Double these under, and bind along top and bottom with a piece of lasting or narrow ribbon, thus forming a loose portfolio-like cover, into which the lids of the book can very easily be slipped.

The habit of wetting a finger or thumb in order to assist in turning over the pages rapidly, is a very dirty one; and though formerly common even among people who ought to have known better, is now, it is to be hoped, confined to careless children at school, or to the servant in a hurry to study her cookery book. It is most destructive. Young people should be trained from childhood never to sit down to a book with unwashed hands. They will not love books any the less if taught to respect them in this manner: and the habit, once formed, will be of importance when they come to handle books that are intrinsically valuable. Another most important point in the care of books is that they should be restored to their places on shelves or in bookcases when done with. Then they are out of harm's way; whereas if left on the table, or thrown on a chair or sideboard, water may be spilt, the puppy (a notoriously mischievous creature throughout his babyhood) may gnaw and worry them, or a thousand-and-one accidents may happen that would never occur to books in their proper places.

Books should all be conscientiously gone over, carefully dusted, and every one "banged," and then dusted again, at the time of the regular spring cleaning, to which subject we would accordingly refer.

Cutting Open.—This apparently simple operation, which it might be supposed that "any fellow could understand," requires some care, and a *blunt* knife of wood, ivory, bone, or metal. Anyone who persists in using a sharp knife—such as a penknife, for instance—is sure to run obliquely into the pages, and the book is thereby spoiled. The cutting that produces a rough edge is also to be deprecated. There is a sharp, swift, clean cut, that exactly answers the purpose, and it is managed by inserting the knife at

a small angle with the fold to be cut, with the right hand, laying the left firmly on it, and carrying each cut homo to the place where the paper is stitched into the binding. The real lover of books prefers the sheets that need cutting, to those cut by machinery; and no doubt there is a certain amount of luxury in cutting open a new book at leisure, and dipping into it as one goes along. On the other hand, these rough edges undoubtedly collect a great deal of dust, which gradually works a little down the page.

Causes of Injury.—Gas seriously interferes with and tarnishes the gilt edges of books, and gilt ornamentation of the binding. Holding a book open with its cover exposed to the heat of a fire warps the back, and too often it never returns to its pristine flatness. Ants, too, in countries where they abound, especially the white ants, are great enemies to the covers of books; and damp speedily produces spots of mildew both on leaves and binding. Where cockroaches abound, they often get into books, and have a great partiality for loose papers; while it is next to impossible to keep the unpleasant insects known as B flats out of piles of paper, whether printed or not. They are sometimes supposed to come with it from the paper-mills, and are as white as the paper itself.

Rules about Books.—Here are a few golden rules respecting books, that we have come upon two or three times in the course of a life-time; once framed and hung up in a library; once in a common-place book, from which naughty children caught carelessly treating their own or other people's books were made to copy them out by way of punishment; and, lastly, in a country newspaper, from which they are now taken:—

- Never hold a book near a fire.
- Never drop a book upon the floor.
- Never turn leaves with the thumb.
- Never lean or rest upon an open book.
- Never turn down the corners of leaves.
- Never touch a book with damp or soiled hands.
- Always keep your place with a thin book-mark.
- Always place a large book on the table before opening it.
- Always turn leaves from the top with the middle or fore-finger.
- Never pull a book from a shelf by the binding at the top, but by the back.
- Never touch a book with a damp cloth, nor with a sponge in any form.
- Never place another book or anything else upon the leaves of an open book.
- Never rub dust from books, but brush it off with a soft dry cloth or duster.
- Never close a book with a pencil, a pad of paper, or anything else, between the leaves.
- Never open a book farther than to bring both sides of the cover into the same plane.
- Always open a large book from the middle, and never from the ends or cover.

To avoid injuring the leaves of books, never put a pencil-mark in a library book.

Always keep your books out of the reach of small children, and in a clean dry place.

Always keep any neatly bound borrowed book covered with paper while in your possession.

Never attempt to dry a book accidentally wet by a fire, but wipe off the moisture with a soft dry cloth.

Never cut the leaves of a book or magazine with a sharp knife, as the edge is sure to run into the print.

Never write upon a paper laid upon the leaves of an open book, as the pencil or pen point will either scratch or cut the book-leaves.

Never lend a borrowed book, but return it directly you have done with it, so that the owner may not be deprived of its use.

Magazines.—There is a vast fund of information as well as interest in our best magazines; and where they are regularly taken, it ought always to be someone's business to see that each number, when read, is placed with its predecessors, and that every six months they are tied up together ready for binding. It seems a heavy expense to have the magazines of several years bound up at one time; but if done annually, the cost is comparatively trifling, and the volumes are really valuable afterwards for the sea-side, to lend to invalid relatives, &c. To this end it is very desirable that all the loose numbers should be kept clean and whole; and though this seems self-evident, there are many who turn a magazine inside out for greater convenience in reading, lay it down anywhere without turning it back, &c. Thus soils, stains, and even ink-spots deface the pages, and the magazine, having lost its distinctive appearance, is liable to be mixed with other papers, tossed on one side, or destroyed. Thus there is a number, or perhaps two, missing, when the time for binding comes; and the cost of replacing them might have been avoided with a little care.

Portfolios.—The best way of preserving drawings, engravings, or any kind of loose pictures not in frames, is in portfolios. These should be of various sizes; for if large sheets and small are all together, the latter are apt to get crushed and crumpled among the former. To keep the contents of folios in order, each sheet ought to have a slip of tissue or stronger paper pasted along the back, so that it folds over and preserves the surface. A great deal depends on the way these things are put back again after being taken out. If it is done pell-mell, or carelessly, they are speedily defaced and injured; and it has often happened that a drawing or engraving kept carefully for a generation, proves to be of considerable monetary value, because in the course of that time it has become scarce, and well-preserved copies are at a premium.

Portfolios intended for valuable drawings, &c., should always be furnished with lock and key, and

if mounted on a stand are much easier to handle. These folios and stands are often very handsome, and form ornamental features in studies, libraries, and the better class of drawing-rooms. Morocco, crocodile, and Russia leather are used for them; or Lincrusta Walton looks very well mounted on a carved oak stand.

Large drawings put into folios too small for them are sure to be spoilt, for the aim and end of keeping them in such a receptacle is to preserve from *dust*, as well as to keep the edges intact; and therefore the inner flaps should always be carefully folded over, and the strings (where there are any) tied.

Framing Drawings.—The frames in which water-colour drawings, chromographs, &c., are put are extremely flimsy; and if any value is set on the pictures, it is wise to order the frames, and have them sent home empty, mounting the pictures, when mounts are required, and putting them in the frames oneself. The easiest mounts to manage are those that have a central space cut out and the edge of it gilded; and when placed exactly in position a dab of gum or strong paste underneath each corner will prevent any after-displacement. Many, however, prefer mounting water-colours on a white or tinted board; and then the great thing is to have both drawing and mount perfectly straight, and the margin of equal depth all the way round. Another essential point in such a frame is the clearness and brightness of the glass, and its freedom from specks and particles of dust between it and the mount or drawing. It should be lifted out of the frame bodily, washed with clean soda-and-water, polished with a leather, and replaced. Then lay the mounted picture face downwards on the glass, place the wooden back of the frame over it, and carefully put in a few brads, taking care not to crack the glass. Have ready some strips of clean brown paper, paste them, and lay neatly over every crack in the boards, and also all round the frame, so that one edge is on the back of the heading and the other on the wooden back. This most effectually keeps out the dust, and pictures so framed will look well for years.

Water-colours should never be hung where they will receive much sunlight, or even glaring daylight, if of any special value. Many of the colours are unfortunately of a fugitive character, and fade under such exposure; though it is consoling to know that, in consequence of scientific investigations carried on for many years, most of such colours are now discovered, and are being abandoned by artists of the present day.

Pictures.—The state of the wall against which a picture is hung should be attended to, as even a

slight amount of damp will produce brown or mildewed spots on a cardboard mount, or a drawing done on any kind of paper, or an engraving; while it produces a slight film of mildew on an oil painting. Oleographs are peculiarly liable to decay, though not very rapidly; still, when once begun, the process goes on steadily and surely. It is peculiarly bad for them to hang against an outside wall. On the other hand, an oil painting should never be hung on the wall through which a hot flue runs, or even the chimney of an ordinary kitchen, which heats the walls of the rooms above it sometimes to a quite alarming extent. After a time curious spots, lines, and patches make their appearance; and if the picture has ever been restored, the places in which it has been done become painfully apparent.

The liability of pictures to injury by either damp or heat will be readily understood if we consider what a picture really consists of. There is first the foundation—the panel or the canvas, the one of which may be warped or split, and the other decayed and perished, by heat or damp, still worse by both alternated. Then there is the ground or preparation laid on the foundation to make it take the colour. In panels this is a kind of distemper, and even on canvas it is more easily affected by water than the painting itself. Then the painting is mixed with oil, which is chemically affected by alkalies, and therefore by soap. And finally there is the varnish. How easily, then, may damp rot and decay a picture, or heat crack and blister it; yet how few people seem to think that it is so! They are familiar with blisters on the garden door, raised by the heat of the sun; but they seem to think it does a picture no harm to put *that* in some place where the sunlight falls full upon it, or on a chimney-breast which may have a temperature of 100° Fahr.

Darkness, on the other hand, fades some colours rapidly. Pictures should, therefore, be hung in a good light, but not in sunlight. When they are to be hung flat, it is a good plan to fix a bit of thin cork to each corner behind, which will keep the frame a small space from the wall, and promote free ventilation behind. The back should be carefully dusted occasionally, as well as the front; and all dust got particularly out of the sides and corners of the frame, because this dust particularly tends to harbour damp and set up decay.

It has become the custom lately to have oil pictures of any special value glazed, or kept in what is really an air-tight box with a glass front. If the case is not thus proof against them, dust and damp will creep in, and the benefit is lost. Some of the most valuable national paintings are thus protected. Of course, a glazed picture needs hanging in a light very carefully chosen, or the glare of the glass is unpleasantly

prominent. Equally of course, the surface of the picture must never touch the glass, or the colour would adhere and come off. At regular intervals even glazed paintings need to be opened and exposed to fresh air, and any little "bloom" which may have settled on them removed; but paintings of such special value will probably be cared for under the superintendence of an expert.

An ordinary oil-painting requires to be frequently dusted; at longer intervals polished or dry-cleaned; and occasionally cleaned or washed. The picture should be lightly dusted every two to three days. This may be done with a light feather brush, taking special care there is no bit of wire, or other harsh material, to cause a scratch. Once a month or so, more or less, the surface should be "polished," or dusted more thoroughly, which may be done either with an old and soft silk handkerchief, or with a roll of cotton-wool. If a handkerchief is used, it must be clean-rinsed from all soap, and carefully freed from all particles of gritty matter which would scratch the surface. Many prefer a pad of cotton-wool, which must also be free from sharp particles, and frequently changed as it becomes dirty. The operator must not press heavily, or he will strain the canvas—"bring the marks through"—and gradually cause an infinity of tiny cracks all over the surface. The rubbing must be light and quick, as if polishing a fragile and very thin sheet of glass you are afraid of breaking; and, like that, an occasional breath on the surface helps the process. A slow touch with a silk handkerchief is apt to make the surface look greasy.

When actual spots or discolourations are observed, the picture should be carefully washed or cleaned: being taken down for the purpose, and laid face upwards on a table. Dusting it over first, it is then wiped delicately over with a bit of the softest Turkey sponge dipped in lukewarm water and squeezed as dry as possible; or a roll of cotton-wool will do used in the same way; wiping the place dry immediately with a soft linen rag. *Soap must never be used*, and it is better to go back to fly-marks and other obstinate spots, and do them again, than wet the place much or keep it damp very long. Moisture thus left would probably permeate the varnish and make it opaque, and any soap would form a chemical combination with the oil beneath. When dry, the picture should be dry-polished as above described. It is, in fact, only the varnish on a picture that enables it to be washed at all; it is, or should be, only the varnish which is cleaned or polished; were it not so, the real painting would before very long be removed. Should there be any painting by any chance unvarnished, nothing beyond dry-cleaning must be attempted with it; but it should, if practicable, be protected by

varnish as soon as possible. A picture may even require re-varnishing; and after a certain time many paintings are much the better for it; but such matters should always be decided and carried out by a professional restorer, to whom alone will, of course, be entrusted the treatment of any very old picture whose

colour has disappeared through dirt and age. The amateur should not attempt more than the dusting and cleaning here described. Benzol and other powerful solvents are often used, but would probably result in ruin to the picture in the hands of an inexperienced person.

WEDDINGS.

ALTHOUGH there is no actual ceremony of betrothal in England, the announcement of an engagement for marriage in any circle creates a certain amount of excitement, and brings extra social duties upon the relatives and friends of the two young people concerned in it. In Germany the announcement is made in the daily papers; but, as a rule, in England it is not made so publicly, though good news on occasions of this kind flies faster even than bad tidings. When once the engagement is definitely settled, the relations and friends should be informed of it, and they should, without delay, offer their congratulations to the bride-elect. Occasionally it may happen that the two families concerned have been slightly, or even not at all, acquainted previous to the engagement. If such is the case, calls should be paid on the bride-elect and her mother by the different members of the family, and the relatives of the bridegroom should seize every opportunity of showing that they are anxious to make the future member of the family welcome. There should be no want of cordiality shown on such occasions, and all the advances should be made from the gentleman's side.

Should there be any difference in the social position of the future husband and wife, it is all the more desirable that great care should be taken to show all attention to the bride and the bride's family. A formal call should be at once paid by the bridegroom's mother and sisters. If distance makes calling impossible, of course a cordial letter, followed by an invitation for a visit, may take its place. The visit may be a trying ordeal for the bride, if all her future relations are unknown to her, but it is one that must be gone through. The bridegroom has no trial of this kind. He is probably well acquainted with the mother, father, brothers, and sisters of his future wife. He has visited the house frequently, and may be even slightly acquainted with some of the other relations of his bride, and he has therefore only to step into his place as one of the family, and receive the hearty welcome awaiting him.

When the first excitement of the engagement has subsided, the question of the wedding-day soon begins to be the engrossing subject of conversation. If there is no especial reason for delay, a long en-

gagement is undesirable. Some people consider that the time of engagement is the happiest in a girl's life. This is surely a mistake, for it is not always easy to perform successfully the double duties to parents and home, and to the betrothed lover. Others contend that a long engagement is necessary, so that the young people may become thoroughly acquainted with one another; but that this benefit ensues is doubtful. Frequent visits, when each is on his and her best behaviour, do not lead to real knowledge of character, and an engaged couple often learn more of one another's little peculiarities when preparations for housekeeping are being made, than during the whole of the courtship.

The style of the wedding, the question of bridesmaids, of breakfast or "At Home," are all questions for the bride to decide. There are few men who care for any kind of fuss, and most bridegrooms are anxious to get the ceremony over as quietly as possible. The date is usually fixed some time beforehand to allow of arrangements being made for house-choosing and furnishing. In England the bridegroom is expected to provide the chairs and tables, though often the wedding presents are a great assistance towards furnishing, and frequently the bride's mother presents her with the house-linen.

Certain times of the year seem to be more favoured than others as suitable for weddings. Summer is more often chosen than winter, and there still seems to linger the old prejudice against May, though why May should be considered the unlucky month of the year it is difficult to say. The old idea that a wedding should never take place on a Friday is rapidly passing away, and there are bold people to be found, who will even risk their happiness to such an extent as to get married on a Friday and in May.

A bride's trousseau is always an important and interesting subject to all ladies. It is of course provided by the bride's parents, and should be suitable to the station in life which she is to occupy as a married woman. Fashions change so rapidly that sensible brides now-a-days do not care to provide themselves with a large stock of made dresses, but prefer rather to be supplied with pieces of dress material, although the votaries of fashion still vie

with each other in trying to procure extensive and expensive wardrobes. The house-linen provided in a trousseau should be marked with the initials of the future husband and wife, and the bride's body-linen with her married name. Sometimes, however, no marking is done until the ceremony has actually taken place, and the change of name is a deed accomplished. Even sensible people are occasionally superstitious on this subject, and refuse to mark a single article until the wedding is over. They even go so far as to send the bride on her honeymoon with all her garments unmarked.

Forms of Marriage.—Whilst the bride is concerned with her trousseau and with the cares of house-furnishing, the bridegroom must give some little attention to the question of the licence, and the form which the ceremony is to take. It is possible in England to be married in four different ways. A special licence is the most expensive form of marriage; it costs fifty pounds, and can only be obtained through an archbishop. It permits, however, of the marriage taking place at any time and in any place; but owing to the expense it is very unusual.

An ordinary licence may be procured through the clergyman resident in the diocese in which the marriage is to be solemnised, or from Doctors' Commons. If it is obtained through a clergyman, either the lady or gentleman must pay him a personal visit and testify to the fact that both of them are of age, or if not, are proposing to get married only with the consent of parents or guardians. Either the would-be bride or bridegroom must have resided fifteen days in the parish.

Marriage by banns, after quite going out of fashion for a long time, has come into favour again, and at present is perhaps the most usual method adopted—at all events, amongst church people. The banns must be published three times, on three different Sundays, in the parish church before the marriage. If the bride and bridegroom reside in different parishes, the banns must be put up in both churches, and the lady and gentleman must have resided at least fifteen days in the parishes.

If the marriage is to be solemnised at a place of worship other than the Church of England, notice must, unless there is a licence, be given three weeks before the ceremony at the office of the superintendent registrar; from which official a certificate is to be obtained. The registrar must be present at the ceremony in the chapel or at the office. A marriage is perfectly legal if it only takes place at the registry office, without any religious ceremony.

The above details usually concern the bridegroom. As a rule the bride only states her wishes as to where the wedding is to take place, and the form of cere-

mony to be gone through. Occasionally, however, it happens that a bride has to apply for her own licence. If the bridegroom lives at a distance, he may be unable to take a double journey, one for the licence and the other for the wedding, and then the bride may be obliged to give the necessary notice herself.

Rings.—The duty of providing the wedding-ring also must be performed by the bridegroom, and, strangely enough, Fashion has her word to say even about a plain gold ring. Our grandmothers wore thin rings; then for a time very thick ones were considered necessary. Whether it be thick or thin, the ring should be made of fine gold, and well made, so that it will stand constant wear. The engagement-ring is sometimes worn as a keeper after the wedding-day; or if the engagement-ring is a fancy one, ornamented with precious stones, a keeper of chased gold may be provided.

In most foreign countries the bride has also to provide a ring for her husband, and the custom is not at all an unusual one in England. A plain, rather thick gold ring is often seen on the third finger of a man's left hand as well as on a woman's.

The wedding-ring must be carried by the bridegroom on the wedding morning, and he should take particular care that it is ready to be produced at the right moment. This is so notoriously not always the case, that it is well for the "best man" to assure himself that his friend is secure from such humiliating annoyance as sometimes occurs.

A friend or relative of the family is very often asked to officiate at the service. If this friend is not the clergyman of the church in which the ceremony is to take place, etiquette demands that the actual clergyman of the church must be asked to assist in performing the service; and even if he is not present, he must receive the fee.

Afternoon Weddings.—The change in the law which was made only a short time ago, by which marriages may take place in the afternoon any time before three o'clock instead of before noon, has effected a great change in weddings, and, on the whole, a satisfactory one. A wedding fixed for eleven o'clock in the morning must mean a certain amount of fatigue and misery to everyone concerned in it. Early rising must begin the day, and very early rising may mean a tedious day. A wedding-breakfast at twelve o'clock comes when few are hungry; and by two o'clock, when all the excitement is over, everyone feels that a long day has already been spent, and yet there is still more of it to come.

This fatigue and discomfort may be, in most cases,

a thing of the past; and many people are glad to take advantage of the alteration in the law, and fix a later hour for the wedding.

As a result of this alteration, there are now many more quiet weddings than there used to be. In the middle classes wedding-breakfasts are rapidly becoming obsolete, though wedding At Homes are growing more and more popular.

The wishes of the bride and bridegroom usually govern the order which the proceedings are to take. If the bride desires that she should be attired in the proverbial white satin and veil, her parents usually manage that so it shall be; but if, on the other hand, she objects to extravagance, and prefers quiet, her will is still law, and her travelling-dress becomes her wedding-dress. There are people who pride themselves on their great common sense, who are desirous that the "nonsense" of weddings shall be entirely set aside once and for all, and that young people shall go forth to be married with no more ceremony than if they were going shopping together. Yet they forget that it is surely fitting that there should be a little stir; that the girl and her husband are leaving their old homes; that they have certainly reached a distinct point in their lives and are about to make a fresh start; and that the event is of great importance to them and their relations. Everyone must condemn extravagance, but there is no need to go to the opposite extreme.

All must perceive that the advantages of afternoon weddings are very great. They are certainly very convenient. There is not the same rush for the bride and her friends as with early weddings; there is time for preparation without early rising; and all the excitement is not over so early in the day. If the wedding is in the afternoon, an At Home is more in keeping than a breakfast; it is not as expensive; and a later hour is certainly more sociable. If what is popularly known as a grand wedding is desired, it can take place equally well, and indeed better, late in the day; for before the alteration in the law already referred to was made, a special licence was needed for an afternoon wedding.

The Wedding.—Invitations for a wedding should be issued a fortnight or three weeks before the ceremony is to take place. The number of invitations must depend upon whether the wedding is to be quiet or not. The nearest relations on both sides only may be invited, or friends and relations alike may be summoned to the ceremony.

The invitations may be issued for the church and for the house, or only for the house. Cards can be bought for the purpose at any stationer's. The invitation would be given in the name of the mother and father of the bride. If At Home cards are

used, the words "on the occasion of the marriage of," or other similar words, should be inserted, to show that it is not an ordinary At Home. If everyone is invited to both church and house, the words "at home from three to six" need only to be added to the invitation to the church. All invitations to a wedding must of course be answered speedily, as in most cases there must be some question of numbers.

If the bride is attired in bridal dress and veil, she will be attended by bridesmaids. The number of her attendants varies greatly. The chief bridesmaid is the sister of the bride if she have one, and the others are usually members of the two families, or particular friends of the bride's. The choice of the bridesmaids' dresses is sometimes a difficulty. The wishes of the bride are of course all-important; but the bridesmaids' wishes should also be consulted. The dresses should be all alike, though sometimes, if there are a number of bridesmaids, half are dressed in one colour and half in another. If all wear the same dress, it is not easy to fix on a colour which will suit several girls equally well, and, therefore, all should be consulted. Very expensive dresses, which will be quite useless on any future occasion, should not be decided upon, unless all the bridesmaids are in such a position that expense need not be considered. The bride must remember all these things, and should be careful how she expresses her wishes about colour, material, and trimming.

When all the dresses are to be alike, if it is possible, one dressmaker should make them. If any of the bridesmaids live at a distance, this may be difficult, but it is certainly a thing to be aimed at. Bridesmaids rarely wear veils, but hats and bonnets to match their costumes, and frequently they carry bunches of flowers or bouquets. If in good circumstances, the bridegroom usually presents his bride with a piece of jewellery, a brooch, or necklet which she wears for the first time on her wedding-day. The bridesmaids also frequently receive some token of remembrance from the bridegroom; and the flowers, bouquets, or posies are provided by the bridegroom.

If there are any decorations in the church, they also must be paid for by the bridegroom, if the wedding takes place in a town. In the country the church would probably be decorated by friends. The night before the wedding is the time for making the final arrangements, for the bridegroom is supposed to meet his bride on the wedding-day for the first time in the church.

The master of the ceremonies on the occasion of a wedding is the "best man," and he should be the bridegroom's greatest friend or brother. He is the only groomsman, however many bridesmaids there may be, and his duties are many.

The carriages used to convey the wedding-party

to the church and back again must be hired by those who use them. The bridegroom is expected to provide those for the bride and bridesmaids only. If there are many of the guests assembled at the house, the best man should arrange the order in which they are to drive, and should settle beforehand who are to drive in the same carriage. The order of going and coming should be definitely settled, or confusion and unnecessary delay will be caused.

People who expect many friends at the church to witness the ceremony very often provide tickets of admission, or use the invitations as tickets, and reserve the seats altogether, or until a short time before the arrival of the bride. Outsiders are very often willing to be present at a wedding, and a crowd usually collects; but outsiders only come out of curiosity, and few brides care to feel that they are "on show." The crowd may be limited if ticket-holders only are admitted to the church, and the bride may then have the pleasure of feeling that she is surrounded, at least, by acquaintances and friends. Certain seats near the front of the church should be reserved whether there are tickets or not.

The bridegroom and his best man should be at the church in plenty of time, and must be in waiting to receive the bride. The guests also should be punctual, and should be ready to take their seats before the arrival of the bride. The ladies should be suitably dressed in bright colours (black should be avoided as much as possible) and the gentlemen should be in morning dress.

The bridesmaids must await in the porch the arrival of the bride. The order in which they are to walk should be settled beforehand, so that as soon as the bride arrives with her father or brother they can fall at once into their places. The chief bridesmaid should walk immediately behind the bride.

The bride should walk up the church aisle leaning on the arm of her father, or of the gentleman who is to give her away, whether it be father, brother, or guardian. The bridesmaids, following her, arrange themselves in twos or threes, according to the width of the aisle. As has been already stated, the chief bridesmaid, the bride's sister, walks directly behind her, and with her should be the nearest relative of the bridegroom—his sister, if he has one. The order of the other bridesmaids does not signify very much, but they will look better if they arrange themselves according to height.

During the ceremony the bride stands on the left of the bridegroom, and the relative who gives her away should stand on her left. The bridesmaids must range themselves in order behind her, the chief bridesmaid standing near to be ready to take the glove and bouquet when the time comes for placing the ring on the finger. If the chief bridesmaid

understands her duties, she will see beforehand that the left-hand glove is not too tight, so that it can be removed quite easily.

As soon as the ceremony is over, the bride and bridegroom pass into the vestry to sign the register. The best man and chief bridesmaid, and perhaps another friend, also sign their names as witnesses. For the last time the bride signs her maiden name. There is little delay when the register has been signed. The best man sees that the carriage is at the church-door, and announces the fact to the bridegroom, who at once leads his wife down the aisle, leaning on his right arm. The bridesmaids follow in the order in which they came, and drive off directly after the bride, or they may return with their friends.

The guests should follow the bride and bridegroom as speedily as possible, but the order in which they follow is quite immaterial. If there is a breakfast or an At Home directly after the wedding, the mother of the bride should be one of the first to leave the church, so as to be ready to receive her guests.

The best man must see after all the carriages and the guests, and should remember that one of his duties is to look after the bridegroom's hat and gloves. Delay has been occasioned before now by the disappearance of the bridegroom's hat at the last moment!

The best man should pay all fees before leaving the church, and he will find that his time is fully occupied. However small and quiet the wedding, no greater mistake can be made than to imagine that it will arrange itself. Where everyone walks to church little arrangement or planning beforehand will be needed; but in a large town, where distances are great, a certain number of carriages must be used, and unless details are planned beforehand there can be nothing but confusion. The bridegroom cannot be expected to look after anything—before the ceremony he is waiting for his bride, and afterwards he drives away first of all. On the best man, therefore, must devolve all the duties of arrangement, and he should give some little thought to the subject beforehand, and not leave everything to the last moment. If the wedding is a very large one, and if there are many guests, stewards should be appointed to assist the best man, and to show people to their places.

After the Marriage.—The house from which the wedding takes place should be arranged to receive the guests. Carpet should be laid down from the hall-door to the road, and an awning may be useful in case of showers, though if it be true that "the bride is happy on whom the sun shines," it is to be hoped that there will be no rain. The whole

house should be made to look as bright and attractive, inside and out, as possible, and flower decorations will greatly tend to this result. The rooms will need a certain amount of arrangement, but this will depend upon the kind of entertainment given.

As there may be people who still prefer the old-fashioned wedding breakfast, it may be well first to speak of that. The bride and bridegroom on their return from church should take up their station in the drawing-room, in which the presents may be laid out; but on the subject of the presents more will be said presently. As the guests arrive they also are shown into the drawing-room, and offer their congratulations to the newly-wedded pair—so the time quickly passes until all are assembled. Breakfast should then be announced, and the bride and bridegroom must lead the way to the room in which it is laid out, and take their seats opposite the wedding-cake—this may be placed either at the head or in the centre of the table.

The guests of the day are, of course, the bridegroom's father and mother, and the bride's father should take in the bridegroom's mother to the breakfast. The other guests must follow in order. The bridesmaids, each attended by a gentleman, may sit near the bride, or may be in different parts of the room. The hostess, accompanied by the bridegroom's father, is, of course, the last to enter the room, and she should be seated next the bridegroom. Much confusion may be saved by placing name-cards round the table, and appointing a place for each person. The table itself should be prettily decorated with flowers. White flowers are, of course, the most appropriate to the occasion, and these should be tastefully arranged with ferns.

If there are any speeches made, though speech-making at weddings is going even more out of fashion than wedding breakfasts, the health of the bride and bridegroom must be proposed by an old friend of the family, and responded to by the bridegroom. Speeches as a rule on such occasions are dull, uninteresting, and very trying, and few people regret that they are becoming more and more out of date.

The bride is expected to cut the cake, though a slice may, if needful, be cut beforehand for actual use. There is an old superstition about the first or ceremonial cut, however, which most brides like to test, if aware of the tradition—especially in the North. It is said that if the bride can insert the knife up to the hilt, without cracking the icing on the cake, she will "have her way" in her own household. The slice is placed on a dish, cut into small pieces, and handed round. Everybody is expected to take a piece of cake, however small.

Shortly after the cake has been cut the bride retires to change her dress, and the guests return to the drawing-room, with the exception of the chief bridesmaid and, perhaps, a favoured friend, who go with the bride to assist her.

If the wedding takes place in the afternoon, the hour usually fixed is a quarter-past or half-past two, so that the ceremony may be over by three o'clock. The wedding party return from the church and arrive at the house at about half-past three. The invitations to the At Home have been issued for a couple of hours or more, and the guests invited drive straight from the church to the house. The bride and bridegroom should receive their friends in the drawing-room, and each friend will then offer congratulations.

Refreshments should be placed in an adjoining room. These refreshments, however, need consist only of tea, coffee, and cakes of all kinds, such as are offered at afternoon At Homes. Wine is sometimes provided in addition, and sweets and ices may also be prepared if desired. At a large wedding something more than tea, coffee, and cake might be considered necessary. Meat dishes are, however, not needed at three o'clock in the afternoon, nor are they expected. The wedding-cake, cut by the bride with the help of the bridegroom, is of course the chief cake of the occasion, and portions thereof must be passed round. Everyone may be invited into the tea-room at the same time, the bride and bridegroom leading the way; or the guests may be invited to partake of refreshment in turn, each one, before leaving, being invited to the refreshment-room.

If there is plenty of room for all the guests to take a cup of tea or glass of wine at the same time, little tables might be provided in different parts of the room, so that the guests could be comfortably seated. A wedding breakfast also might be served at several little tables, instead of at one large table. This plan will be found to be very successful. The arrangement prevents stiffness, and the guests are more likely to be friendly and enjoy themselves if there is less formality.

Speeches at an At Home are not expected, and are best omitted. The guests do not stay any length of time. They offer their congratulations, look at the presents, partake of slight refreshment, and then leave. Should there be any entertainment in the evening they may return for it, if invited, but they do not expect to stay long.

When there is a wedding breakfast, and the bride and bridegroom depart directly after it, one of the disadvantages of the occasion is that there seems to be no particular time at which the rest of the company may be expected to take their leave; and so

perhaps they stop on and on, having nothing to do, when their host and hostess would be only too glad if they would take their departure. But when guests are definitely invited from one hour to another, as in the case of the wedding *At Home*, they know at what time they are expected to depart, and the hostess has the feeling also that the time is fixed.

The Departure.—The bride and bridegroom can leave any time during the afternoon. Indeed, it is not necessary that they should be present at the *At Home* which is held after the wedding, though the proceedings are much more interesting if it is arranged that they shall remain for a while.

The departure of the bride and bridegroom always causes some excitement. The old customs of throwing rice and shoes are not nearly so popular as they were. Accidents have occasionally happened in consequence of rice being thrown, and these have prejudiced people against it. Throwing rice is, however, a very old custom, and dates back for many years; and the established rule is that it should always be thrown by married women, not by maidens. It is, however, far better to omit the custom and avoid the danger. The bride and bridegroom will probably feel no regret if it is dispensed with; they never enjoy the process, and the bridegroom will probably enjoy his wedding-trip the more if he is allowed to commence it without a handful of rice down his neck, or having the carriage labelled, as it were, for all to read. Why there should be such persistence in inflicting what is well known to be a cause of pain and annoyance to those chiefly concerned, is hard to say; and it is certainly not consistent with that kindly good feeling which ought to characterise such occasions.

One is sorry to see all old customs die out, and the practice of throwing old shoes is not very dangerous or objectionable in any way. The shoes are supposed to be thrown by the unmarried members of the party, and may be regarded as a farewell token to those who have just left their number and joined the married people. The old idea is that the shoe was thrown after the bride as a symbol that her father had given up his authority over her. Nowadays both old shoes and rice are merely regarded as signs of good luck. The rice is dangerous, but the shoe-throwing might well be continued—it is useful, because it serves to produce merriment and diversion at a trying moment. Every girl must feel somewhat sad at leaving her old home, however fond she may be of her husband; she will not care to show her feelings before strangers, and will gladly welcome anything likely to cause confusion and merriment and hide what she is feeling, for when she leaves her father's house for her wedding trip she leaves it for ever as a home.

The luggage of the young people should be carried to the cab before the farewells begin. The bridegroom's luggage may either be sent to the station beforehand, or brought to the home of the bride early on the wedding morning. The amount of luggage must, of course, depend to some extent upon the length of the honeymoon. All the wraps and trunks should be safely packed in the cab, so that nothing may be left behind. It is very undignified for the best man to be obliged to follow the newly married couple with a forgotten hat-box or roll of wraps; but it is worse if they forget anything very important and are obliged to return for it. Yet mistakes of this kind frequently occur in the hurry and bustle of the moment.

When once the bride and bridegroom have left, the chief excitement of the day is over. If they have been obliged to set out on their wedding journey early in the day, and if there are many friends staying in the bride's house, it is well to arrange for some form of entertainment in the evening. Occasionally a dance is given; but this is out of the question unless expense need not be taken into consideration. A dance must give a great deal of trouble, and requires preparation; and if the wedding is fixed for some time during the summer, a dance in hot weather would not be enjoyable.

A much easier way of solving the problem is for the whole party to go to some place of amusement—a good concert if all are musical, or, better still, the theatre. If the wedding is in the afternoon, an arrangement of this kind fits in very well. By the time the *At Home* is well over, an hour's rest has been granted and substantial refreshment enjoyed, it is time to start for the theatre. If the wedding is in the morning, however, something more than evening entertainment should be planned. A drive or excursion on the river might then help to fill up the hours and pass the time pleasantly.

There is (naturally, perhaps) always great interest taken in a newly married couple, even by total strangers. Their movements are watched, and even railway porters and cabmen regard them as objects of amusement. If the young people enjoy this, all well and good; but if they object to it, the bride and bridegroom can do much to avoid attracting notice. They need not appear before the world in absolutely new garments. The bride may provide herself with a hat and pair of gloves which are not too new-looking, and the bridegroom may wear an overcoat which does not look too much as if it had just left the tailor's shop. Nor need they be so demonstrative as many newly wedded people are in their behaviour.

One thing that should not be forgotten in a bride's trousseau is a purse containing a certain amount of

money. That money should not be only in the form of one five-pound note, or several five-pound notes, but there should be some small change amongst it. A young wife never cares to ask her husband at once for money, and yet she may be very awkwardly placed if she has none. A girl is apt to forget this; and, as perhaps it is some time since she was a bride, the mother may forget it too; but it will be a great pity if it is entirely forgotten.

The announcement of the wedding should appear in the paper the day following. The bridegroom will probably be unable to attend to this duty, and once more the best man must step in and relieve him. The notice should be carefully drawn up in the recognised form, and small particulars must be carefully noted. There must be no mistakes about initials, the names of bride and bridegroom must be in full, and no name of any clergyman assisting at the wedding must be left out. If, as it occasionally happens, the bride is known in a large circle of friends by an abbreviated name entirely different from her own, it is well to insert that also in brackets after her real name.

Wedding-Cards and Cake.—Very often nowadays the notice of the wedding is followed by the words "No cards." Cards are going very much out of fashion, and, unless there is a very decided change, in a short time wedding-cards will be entirely things of the past. At the present time very few are sent, and those few are chiefly used for relatives and friends living at a distance and unable to be present at the wedding.

Wedding-cards are always printed especially for the occasion. Usually they are white, cream, or coloured with a silver border. The name of the newly married couple, the future address of the wedded pair, the bride's maiden name with a line drawn through the surname, and the date of the wedding-day, are all printed in silver letters. Small envelopes, silver-edged, are usually provided with the cards, and these are enclosed in ordinary envelopes.

For friends at a distance, the sending of wedding-cards is certainly the most pleasant notification of a wedding. The announcement in a daily paper does not seem a compliment to them, or an especial notice for them, while wedding-cards are both. On this account it will be a pity if cards on these occasions go entirely out of fashion, though no one can regret that it is no longer considered necessary to send cards to those who were present at the wedding itself. The custom of sending wedding-cake in small boxes has also gone out of date in good society, and few can regret that it has passed away. A very small piece of cake, which usually suffered a certain amount of squeezing in the post, gave little

satisfaction to the receiver, and caused both trouble and expense to the sender. Those present at the wedding are expected to taste the cake there. Anyone who calls on the bride may be offered cake with afternoon tea, though the custom of offering this is also passing away. Two pieces of flattened cardboard, tied with dirty white ribbon, have been frequently, in days gone by, the only signs of the wedding-cake that have reached the person to whom it was addressed. Such a parcel was an empty compliment, which might well have been omitted.

Quiet Weddings.—Whenever there is a wedding breakfast or afternoon At Home given after a wedding, there must be a certain amount of expense and a certain amount of confusion. The At Home may mean less than the breakfast, but it must cause some trouble and confusion. Occasionally there are reasons why a wedding should be as quiet as possible, and it is quite easy to accomplish this.

Reasons of economy often oblige a bride to have what is known as a very quiet wedding. Her parents are not in a position to spend money over bridal veils and white satin dresses, and as they wish to avoid extravagance, the bride is married in her travelling-dress.

If the members of the family are in mourning, and there has been any recent bereavement, a "grand wedding" would be an annoyance to them, and quite out of keeping. At the same time, it may not seem desirable to alter the date of the wedding, and so a very quiet wedding is decided upon, and the bride puts off her mourning for her wedding-day.

If the bride is over a certain age, if she is no longer young, she will, as a rule, prefer to be married very quietly. White satin and lace seem more in keeping with a girl than with a middle-aged woman, and quiet happiness than loud merriment. A widow would also probably prefer a quiet wedding. She will not choose white satin or white muslin, but will select grey or lavender for her wedding-dress.

Apart from reasons of economy or age, many people prefer a very quiet wedding. To be married is rather nervous work for any bride, and of her own free will she may choose to be married as quietly as possible. Her bridegroom is unlikely to offer serious objections, or put any obstacles in her way. If a bride-elect wishes to let it be understood at once that her wedding will be a quiet one, she announces that she will be "married in her travelling-dress." The term "travelling-dress" is very often only a term, and the garment actually worn at the wedding is not by any means one that would be selected by ordinary people for a railway journey.

Travelling-dresses on such occasions are usually of a light delicate colour. Fawn, grey, electric blue, or

any of the lighter shades of green, are all suitable. No veil is worn on the head; but in its place is worn a bonnet, or even a hat, to match the dress, the straw of the bonnet being of the same colour as the dress. A bouquet of flowers is usually carried in the hand, and these may be white or coloured; and flowers may be worn at the neck, if liked. The flowers give quite a bridal appearance, especially if they are white. It is not at all unusual for a bride thus attired to be followed by one or even two bridesmaids. They also must be dressed in light colours, white of course being out of the question, and they may carry flowers; though, if the bride has none, none must be carried by her maids.

If the bride has a sister, she acts as bridesmaid. It is, perhaps, more convenient to have two bridesmaids than one. The bride, of course, walks up the aisle with her father, and the bridesmaids follow. If there should be only one bridesmaid, she may feel rather awkward, walking alone and standing alone during the ceremony. Whether there are bridesmaids or not, the bridegroom must always provide himself with a "best man." However small or quiet the wedding may be, there are always certain fees to be paid, certain arrangements to be attended to; and the "best man" is the proper person to see after matters of this kind. A bridesmaid may perhaps be looked upon as a luxury, but a "best man" is almost a necessity.

After a very quiet wedding, the bride and bridegroom may drive directly from the church or chapel to the station, and at once start on their honeymoon without festivities of any kind. If their journey is to be a very long one, this may be considered necessary; and if such is the case, all the luggage may be sent to the station the day beforehand. This is a better and more convenient plan than any by which the happy couple are obliged to take their own luggage. It is not pleasant for the bride to arrive at the church in a carriage or cab, the top of which is crowded with luggage; and it is rather a pity for the newly married pair to return to the house only for luggage, if they intend to make no stay. If the luggage is sent to the station the day beforehand, all trouble is avoided.

Still, unless it is absolutely necessary, it seems undesirable that the bride and bridegroom should not return, after the wedding, to the house. There need be very little expense, and not much trouble, and yet the bride may cut her wedding-cake herself on her wedding-day. If the young couple are married in the afternoon, they might return to the house and receive the congratulations of a few of their most intimate friends and nearest relations. This need not involve even an afternoon At Home, but might be regarded as an afternoon tea, at

which wedding-cake is provided instead of ordinary cake.

No formal invitations need be issued, but the nearest relations on either side might be asked to come back to the house after the wedding. There they might see the presents, drink a cup of tea, eat a piece of cake, spend a pleasant hour or hour and a half, and then, after the departure of the bride and bridegroom, take their leave and depart also. No wine would be expected for a simple entertainment of this kind, no eatables beyond bread-and-butter, tea, and cake; there could be very little expense, and yet this kind of informal gathering of friends and relations would make the wedding-day seem more of a fête-day.

For a bride and bridegroom should always remember that there are others indirectly concerned in their wedding. Though they may prefer to avoid any celebration, any congratulation, or possible opportunity for speech-making, yet after their departure time will hang heavily on the hands of the would-be merry-makers left behind, if there is no merry-making to be done. The short service in the church, and the farewells after, will be a brief termination of all the preparation, all the consultation and planning; and it will seem as if the marriage so long thought of, and looked forward to, cannot possibly be over so speedily. It is not easy, after an important event of this kind has happened in a family, for the various members of it to settle down at once to the ordinary work of every-day life. It is only natural that the wedding-day should be marked out for those nearest to the bride and bridegroom, as well as for the newly wedded pair themselves. A pleasant gathering of friends and relatives of this kind, to wish the young couple "God-speed" on their new start in life, cannot be considered out of place or extravagant; and, after all, a wedding-day only comes once in most people's lives.

Wedding Presents.—If the sending of cards and cake is going out of fashion, the custom of giving wedding presents is becoming more and more popular. The increase of presents is growing so rapidly, that it is more than probable in coming years there may be a sudden decrease. The custom is becoming abused. People are beginning to give presents, not from any great affection for, or desire to show goodwill to the bride and bridegroom, but because they feel obliged to do so.

This is, of course, a great mistake. The idea in itself, that of helping the young people in their new start in life, is a pleasant one; but if the practice becomes a mere form, it will certainly be abused, and die a natural death. When Christmas cards were

first introduced, they were only sent to intimate friends and relations far distant, then they began to be sent to slight acquaintances, and now they are rarely sent at all. Wedding presents, not many years ago, were only given by relations and very intimate friends, now they are often presented by slight acquaintances. Will the time ever come when they, too, will cease to be given?

At present it cannot be doubted that the substantial wedding gifts presented to bride and bridegroom are a very great help to the young people starting house-keeping, and it is very pleasant for them not only to be saved expense, but to see around them so many tokens of remembrance from friends and relatives. If wedding presents are selected with care and thought, if more trouble than the putting of the hand into the pocket is taken in buying them, they must prove very acceptable.

Everyone has heard of brides with four biscuit-boxes and three claret-jugs; for duplicates of presents are unfortunately very common. Duplicates of useful articles are perhaps better than useless presents. It has been suggested that if there is a large family, and if there are likely to be many presents, a committee of friends should be formed to decide what form the presents shall take. Perhaps, on the whole, this plan would not be found to turn out more satisfactorily, but it would be an interesting experiment to try.

As a rule, people who purchase presents consider what they themselves would like, rather than what is likely to please and be useful to those for whom the present is intended. Often a present is bought rather because it will cost a certain sum of money, than because it is likely to prove really useful. Naturally, perhaps, handsome-looking gifts are chosen in preference to useful ones, when if the receiver is in need of the useful presents, the handsome ones may be rather out of place.

In the case of wedding presents the position of the future man and wife should be taken into consideration. If they expect to live in a moderate-sized house, and do not expect to go out much into society, presents of jewellery to the bride will be rather useless. If good, they will of course be handsome; but if the bride has little occasion for wearing jewels, they will be rather a weight on her mind than otherwise.

Wedding presents may be given to both bride and bridegroom, or to the one or the other. They may take the form of articles useful in the furnishing of the house, or of personal presents. As a rule, perhaps, personal presents are less satisfactory than useful or ornamental articles.

Pieces of plate, salt-cellars, cruet-stands, toast-racks, and butter-dishes are very usual gifts. They

prove very acceptable, unless the household is a very small one, when, as there is no one to spend the necessary time in polishing them, they pass their time in bags.

China and glass are always acceptable, though if the china is intended for use and not for ornament, it should not be so fragile and choice that it will be very expensive to replace breakages. If it should be very costly, the bride will do well to keep it only for best, and purchase cheaper ware for every-day use. Very fragile ornaments and flower-vases should not be chosen for presents. If they are put away the giver is not pleased, and if they are broken the bride is troubled.

Afternoon tea-tables and tea-sets are very favourite presents. They are popular, probably, because they are useful and, at the same time, ornamental. Tea-cloths for those same tables are gifts usually presented by the bride's girl friends, and are worked by them. Pieces of needlework in any form are sure to be acceptable. Every bride is glad to see specimens of needlework about her house, and if they are gifts from friends she is sure to treasure them.

Paper-knives and inkstands must be rather looked upon as refuges for the destitute, but clocks and ornaments for the mantelpieces have been popular as wedding gifts from time immemorial. It is not difficult, with a little thought, to purchase a gift which may be acceptable, useful, and pretty; but without that thought the present may only prove a white elephant. What can a lady, who has not barbarously pierced her ears, do with a pair of earrings? And surely a plated dish, which is so heavy that a man-servant would be needed to carry it, is out of place in a small household where one maid reigns alone in the kitchen.

Sometimes cheques are given instead of actual presents. A cheque presented in this way would, of course, be for a substantial sum, and this being the case, would only be given by some very near relative or friend. From a mere acquaintance such a gift would be out of place. Money coming in this way is, of course, very useful and most acceptable; but many people would prefer a present of some article, though it might not be quite so costly. There is a personal element in an article of furniture or ornament of any kind. Individual taste has been exercised, and thought and time have been given in the choice, and there is nothing of this kind where it has only been a case of writing a cheque.

Wedding presents may be sent any time after the wedding-day is definitely settled and announced, but it is better to send them a very short time—about a week, perhaps—before the wedding-day. In former days a letter of congratulation always accompanied the wedding present; now it is considered sufficient

if the donor's card only arrives with the gift. A few words might be written on the card, such as "With kind congratulations" or "With best wishes."

The presents must be acknowledged at once, the sooner the better. No delay must be permitted, for delay in giving thanks appears ungracious. Presents given to both bride and bridegroom should be sent to the house of the bride and acknowledged by her. Personal presents to her would be sent in the same way. Gifts to the bridegroom only would be sent to him, and by him should be acknowledged.

Everyone attending the wedding—that is to say, invited to it—usually sends a present of some kind to the bride and bridegroom. If the invitations to the *At Home* or breakfast are obliged to be limited on account of space, preference would be naturally given to those friends who had sent gifts, that some slight return may be made to them. Relations on both sides have, of course, the first claim; but in all probability they would be also present-givers. If the wedding is a quiet one, wedding presents should be given all the same, though the givers will not in such a case expect an invitation to the wedding. At the same time, if it is very quiet, if the date is only announced to intimate friends and relatives, the bride and bridegroom will not be viewed by crowds of people, but also they must not expect too many remembrances.

There is much to be said for and against the exhibition of wedding presents; it may be considered by some people as vulgar, but it helps to pass away a rather awkward time, and is certainly interesting. The bride and bridegroom can, after all, only be congratulated once by each person, and these congratulations rarely entirely occupy the interval between the return of the first guest from the church and the arrival of the last, and looking at the wedding presents fills up the time pleasantly. Whether there is a wedding breakfast or a wedding *At Home*, there is always an awkward interval during which guests are arriving. The givers of the presents are usually more pleased if their presents are laid out; it shows that they are appreciated, at any rate. The argument on the other side is that all gifts are equally acceptable, not because of the value of the gift, but of the kindly feeling of the giver; and if gifts are laid out and exhibited, attention is drawn to the more costly ones, and comparisons may be drawn. It is a question for each bride to decide for herself; but, if no presents are shown, she and the bridegroom and her friends will find the time hang heavily on their hands.

If the presents are to be shown, some care must be taken in arranging them, so as to exhibit them to the best advantage. Plants and flowers should be placed amongst the gifts, which should be arranged

on tables. All the ornaments, or most of them, which belong to the room should be taken away. The mantelpiece should be decorated only with the presents. If there is a clock (and there probably will be one, or even two) it will show to most advantage on the mantelpiece. Articles of plate are best seen on a white table-cloth, though fish-knives and forks, or dessert-knives and forks, must be left in their cases, not laid on the cloth. If a dinner-service or tea-service forms one of the presents, only a few pieces of it will be shown—a cup and saucer, a plate and vegetable-dish; any piece which will give an idea of the pattern will be sufficient. Books (presents only too rarely given) may be shown on a table, though if they are all bound alike, being the works of one author, one or two only will be required. Cut flowers should be arranged in the flower-glasses; they will improve the appearance of the glasses themselves and of the whole room.

As far as possible the gifts should be arranged as they would stand in an ordinary room, and not placed in extraordinary positions—a fire-screen on high, or small tables on large ones. With a little taste and management wedding presents may be made to look extremely pretty in this way. Sometimes it is recommended that all the articles of the same kind should be put together. All the plate, perhaps, arranged on one table, and all the china and glass on another. There is a certain amount of order about an arrangement of this kind, but it is rather doubtful whether it will be very effective, and also it increases the danger of comparisons being made. If two flower-vases are close together it is only natural to compare them, whereas if the one were on one table and the other on another, each would more probably be admired for itself.

As has already been said, a card from the sender should accompany the gift. It is perhaps better in arranging the presents to take away the cards, and not give a list of the donors. The bride and bridegroom are not likely to forget from whom the presents were sent, and it is not necessary for everyone else to know. If the cards are removed, it cannot be considered vulgar to show the presents to friends and relations, and give them the opportunity of admiring pretty things, and rejoicing with the bride and bridegroom in their possession of so many kind friends.

Very large presents, such as the furniture for a room, a wardrobe, or a piano, cannot of course be exhibited, as such articles are not easily moved. If the young people are so fortunate as to receive such presents, some recognition must be made of them when the presents are being shown. The best way is to write a list, and under the heading of "Presents not shown," to note the larger presents. This list should be set in a conspicuous place, so that the

donors of such presents may see that they are not forgotten. No very costly presents should be offered to a bride, except by near relatives or intimate friends. A very costly present from an acquaintance would place the young people under a sense of obligation which could only be a burden, for they would feel unable to make even a slight return.

Sometimes the wedding presents are shown the day after the wedding. Such an arrangement may be made if want of space has prevented several friends from being asked to the At Home or breakfast. As the bride must, of course, be absent, it is a good plan to keep a record for her of the people who come to see her presents. Each one, on entering the drawing-room, should be asked to sign his or her name in a book. This record is sure to be valued by both bride and bridegroom afterwards.

Bridal Calls.—The return of a young couple from their honeymoon is the most important event of the occasion after their wedding. After a certain interval, friends feel that it is their duty and desire to call on the bride. The interval is usually a short one, for brides of the present day usually return home to find their houses in excellent order. Everything not finished before the wedding-day has been completed in the bride's absence by loving hands, and the house is quickly ready to receive visitors.

When cards were sent out directly after a wedding, days upon which the bride would be "At Home" to receive her friends were frequently announced upon them. This was a plan which certainly simplified matters. On those days the guests found the bride, and possibly the bridegroom, waiting to receive friends, one of the bridesmaids presiding over the teapot, and all went smoothly and well. Where there are no cards sent, the formal call must be paid without delay. There will be a certain risk of not finding the bride at home, for she cannot be expected to spend every afternoon for a fortnight or three weeks sitting in her drawing-room awaiting guests. After the first fortnight, some of her time must be occupied in returning calls; for, unless the first call is returned within a month, the caller will perhaps conclude that the bride does not wish to continue the acquaintance. For friends at a distance, fixed days, upon which they can feel certain of finding the bride ready to receive them, are very convenient. Though the etiquette of the day rules that no cards are to be sent, no cake offered at a bridal call, and no At Home days fixed, circumstances must govern each bride's actions, and the rule must be altered to suit the circumstances.

In the country and in a large town the case is utterly different. In the country a bride's return is

at once known to the neighbourhood; it is an event. In a large town a bride's return is only known to her relations and nearest friends. In the country, if the bride is unknown, her husband's friends will at once call upon her, as they would do upon any new-comer. In a large town, bride and bridegroom may settle down in a neighbourhood where both are unknown, and at some distance from their friends. If such is the case, if the bride has no particular days for receiving her friends, the probability is that she will not see half of them, unless she stays in every afternoon.

In a large town—in London, for instance, where distances are great—a bride will probably find it more satisfactory, if she and her husband have at all a large circle of acquaintances, to send out cards announcing that she will be "At Home" on three or four days. Then she can be quite prepared to receive their friends and show them attention. If her husband is unable to be present—and in middle-class circles few husbands are disengaged in the afternoon—the bride would do well to ask his sister, if he has one, to assist her in making and pouring out tea, and in attending to her guests. It is a very trying position for a bride to receive friends of her husband's who are totally unknown to her. She must feel, to a certain extent, that she is being criticised, and she cannot feel altogether at her ease. Yet, of course, her great endeavour must be to please and make a good impression on friends of her husband. With her own and her mother's friends the bride will naturally feel quite at home, and give them a pleasant welcome.

Not very long ago wedding-cake and wine were always offered at a bridal call. After a time the wine was considered quite unnecessary, and tea was used to supply its place; now wedding-cake need not be produced. At the same time, wedding-cake very frequently appears on such occasions, and cannot be looked upon as out of place. Though the young people, perhaps, will not notice the omission of the offering of the cake, older ones might feel rather slighted if cake were not brought out.

Different circles of acquaintances have frequently rules of their own for the smaller details of etiquette, and though the world of fashion may dictate this and that change, it is not absolutely necessary for all to follow these changes blindly. If the bride has made up her mind to have At Home days, when her bridal calls are over, she may have the dates printed on her own private cards; and if she leaves these when she pays her first calls, the days will soon become known.

When the bridal call has been paid and returned, invitations to dinner will shortly be received by the young couple. This is the next step in forming

their circle of friends. If the dinner is a formal one, the bride may appear in her wedding-dress. She is looked upon as the guest of the evening, and would be taken into the dining-room by the host, taking precedence of older ladies. The bridegroom need not of necessity share her honours. It used to be considered *otiquetto* for the bride also to be the first to leave after the entertainment was over, and to give the signal for others to take their departure; this is a rule, however, that is not strictly obeyed at the present time.

After three months a young married lady is no longer looked upon as a bride. By that time probably someone else has followed her example in getting married, and she in her turn becomes the bride to be honoured.

The entertainments which have been given to the bride and bridegroom must be followed after an interval by invitations from them, and they in their turn must become the entertainers. No one who has shown them attention of any kind must be neglected, and all should receive an invitation of some kind. The young people should make up their minds, however, to begin housekeeping as they intend to go on. Invitations for which a return cannot be made should not be accepted. If the house is a small one, and the household also small, it stands to reason that grand dinner parties cannot be given, and therefore grand dinner parties should not be attended. Much after-trouble, much worry, and probable chance of extravagance may be saved, if a bride and bridegroom whose income is small realise, before the bridal calls are all returned, with whom they can afford to be acquainted and whom they can entertain, who shall be looked upon as intimate friends, and who must only be regarded as acquaintance.

At the same time, the bride should endeavour to keep up her husband's position, and give his friends her very best. She should try to make his friends her friends, and let her union with him be no reason for his giving up old friends, though it may be a reason for making new ones.

Wedding Anniversaries.—It may not perhaps be out of place here to say a few words about wedding anniversaries. The custom of celebrating anniversaries of the wedding-day is a growing one and a pleasing one. The first anniversary is usually remembered by husband and wife, and there is no reason why every anniversary should not be a red-letter day in the family calendar. Different names have been bestowed upon anniversaries at different stages of life. The Iron Wedding is celebrated on the fifth wedding-day. The tenth wedding-day is known as the Fire Wedding, the twenty-fifth as the Silver, the fiftieth as the Golden, and the seventy-

fifth as the Diamond Wedding. It is becoming very usual to celebrate in some way the Silver and Golden Weddings. The Diamond Wedding is such a rare occurrence that one does not often hear of its celebration.

A Golden Wedding usually means that there are children and grandchildren in existence; and if such is the case, it is pleasant for them all to be present at the celebration thereof. A Golden Wedding also means that the former bride and bridegroom are no longer young, but advanced in years, and therefore the celebrations have to be arranged to suit the age of the chief persons concerned, and the festivities must not be too merry or boisterous.

If friends are invited to a Silver or Golden Wedding, they usually bring an offering of some kind. The popular idea is that Silver Wedding presents must be made of silver, and Golden Wedding gifts of gold. This is not at all necessary, or in the case of a Golden Wedding the giving of presents would cause great expense. Offerings of all kinds may be made, anything which will prove acceptable to the hero and heroine of the occasion being suitable. Announcements of Golden and Silver Weddings frequently appear in the daily papers, perhaps those of Golden Weddings the more often of the two. The announcement is simpler than that of an ordinary wedding. The name of the church, the date of the day, month, and year, and the names of the former bride and bridegroom are all that are needed. The words "Golden Wedding" or "Silver Wedding" should be inserted in brackets after the announcement. This is a pleasant way of making the fact known to friends and acquaintances, whether there are any especial festivities arranged for the occasion or not.

The institution of marriage is surrounded by a good many forms and ceremonies; yet we ought to remember that the customs which belong to it have, probably, been long maintained, because they are popularly regarded as a sign of the importance of the occasion. And surely, if we think seriously, we shall acknowledge that it is only right that the institution should be guarded and distinguished in every way that is possible. The interests of society are bound up in it, and the welfare of the community rests upon its purity being maintained; while for the individuals concerned it is the turning-point of life. As George Eliot once said:—"What greater thing is there for two human souls than to feel that they are joined for life, to strengthen each other for all labour, to rest each other in all sorrow, to minister to each other in all pain, to be one with each other in silent, unspeakable memories at the moment of the last parting."

CARVING.

THE art of earving, for it is an art, properly speaking, appertains more to the dining-room than to the kitchen; still it is by no means an unimportant consideration connected with our daily food.

"Lor! The way master do 'ack things about is shameful. To see tho way he sends down the joint is enough to set one against their meals altogether. As nice a bit of beef as ever was roasted, and all the middle dug out in a 'oller, and we servants supposed to eat the end; and as for sending it to table cold, looking commonly decent—there, you might as well dress up a 'unchback."

There is a good deal of truth in cook's complaints. Bad carving, with its consequent waste, depends upon several causes; the chief of these being indifference, stupidity, greediness, awkwardness, laziness, &c. We would ask bad carvers—though, unfortunately, many of them are unconscious of their own deficiencies—to say which of these is the reason of their own infirmity.

There was once, many years ago, a man who kept a school for little boys, who used to say he never knew the difference between a leg of mutton and a shoulder. Because he had heard that all great men were early risers, this gentleman used to rise at some absurd hour in the morning, and recruit his exhausted intellect, after teaching, by a long sleep in his arm-chair after an early dinner. His wife earved for him, and virtually kept the school, of which fact he was profoundly unconscious. We mention this to show that there exists a class of men in the world who, from pure affectation, pretend to ignore all knowledge of domestic duties. They think, or persuade themselves they think, that a knowledge of household matters is incompatible with a high order of intellect. There is an old story of Sir Isaac Newton, who placed his watch in the saucepan and watched the egg, which he held in his hand, while it boiled, so abstracted were the thoughts of this great genius. It does not follow, however, that we should rise to the level of Sir Isaac were we to boil our watch.

Effect of Cutting Different Ways.—The question arises, are there any general principles in earving to be observed? It is a subject worthy of thought. Is it a fact, or is it not, that meat tastes differently if you cut it one way, from what it will if you cut it another? By way of example, to illustrate what we mean, we will take a loin of mutton; and as this is not only a scientific investigation, but a solemn inquiry into the highest duty of the everyday life of every great man, we will not attempt to lay down any law, but approach the subject with the reverence due to it. The loin of mutton

has been jointed by the butcher. It is cut in chops right through, and we have our help. There is the upper part, the under-cut, the bone, the piece of fat at the end, which we all know gets cold very quickly, and, alas! the end which everybody does not dare to leave on their plate untouched. The poor relation dining at the house of the rich one would probably eat the end from motives of policy. The well-to-do man, if he condescended to dine with the poor relation, might possibly eat the end to tickle his own vanity under the guise of setting a good example; and both are hypocrites. But suppose the loin of mutton had never been severed from its brother loin, and had been roasted as a saddle, and you simply cut the same thing the other way. Had the saddle of mutton been knighted instead of the loin, how much more suitable would the serving have been! The saddle of mutton, compared to the loin of mutton, is much more like the City alderman that had been knighted. What a rise in life! We associate the saddle with the tables of the great, or the brilliantly lighted dining-saloon of the Pall Mall clubs. Cut one way, it demands red currant jelly and French beans; it is red and juicy; while the other way the red currant jelly disappears, cabbage and potatoes are its only accompaniments, and its redness has disappeared. As a loin it is very nearly always overdone, and—why, we cannot say—the fat seems to get cold sooner. Was a saddle of mutton ever eaten with a steel fork? Answer—Never. Was a loin of mutton ever eaten with a steel fork? Answer—Often. Why? We cannot say; but these things open up grounds for reflection, and show that there is as much difference in the way in which a sheep is cut up even now, as in the ancient periods of history when the Norman barons ate the meat, and the Saxon serfs looked after the animals while alive. While the animal lived, it was known by the Saxon name of sheep; when dead, the poor Saxon had no interest in it, for, alas! he was never allowed to eat it. It was reserved for his betters, and went by the name of *mouton*, which has since been corrupted into "mutton." There is a good deal of this sheep and mutton business going on in the present day.

Another instance in point is the haunch of mutton and the leg. Everyone cuts the leg clean across, and the greedy man, possessed with knowledge, desires that particular cut containing the Pope's eye. The haunch of mutton is the leg, with our friend the loin stuck on the end—or rather never severed; it is exactly the same thing cut the other way. Now, why is a nice slice out of the best part of the haunch generally considered superior to a cut off the leg? We do not say it *is* superior, but it is

generally considered so. At any rate, it is generally considered worthy of the red currant jelly. Now, the question arises, is it superior, or is it the associations of French beans and jelly, and other surroundings, instead of the cabbage and the potatoes, that make us fancy it superior? Or, is it owing to the general principle, that the larger the joint the better it tastes? All these points are worthy of consideration.

In the first place, with regard to the loin, there is this fact which must not be overlooked, that the loin suffered considerably in quality from being jointed. Every chop across the bone makes a hack into the meat, and each of these hacks lets out the gravy while cooking. Were we to have our loin of mutton roasted whole, without being jointed at all, and were we to cut it like a saddle, there is no reason whatever why the joint should not taste as good as a saddle; and were we to cut off the end bodily before it was roasted, and make the fresh end into an Irish stew, instead of leaving it, as is too often done, on the plate, to be thrown away, we should save money. Why this is not more often done it is impossible to say, except that the curse of cooking in this country is *tradition*.

There is this one principle which should be borne in mind in carving, and that is, to keep the gravy in the meat. If we cut a leg across, do we let out more gravy than if we cut it parallel with the bone? Let us imagine a slice in the calf of our own leg. Most people would probably prefer a gash longways, and unless we cut through some very big artery or bloodvessel, probably there would be less bleeding. In carving a saddle of mutton as a saddle, we come in contact with the main bone—the spine. In cutting it as a loin is generally cut, we cut it at right angles to the bone. This is a point that deserves some little thought. Again, there are joints the carving of which seems to depend upon no point except custom. Take, for instance, a sirloin of beef: the top part to be cut one way and the under-cut another. Judging by analogy, a sirloin of beef would taste best roasted whole, were it then carved like a saddle. For all we know to the contrary, this may have been done. However, a sirloin is sufficiently nice as it is to render this momentous question one to be settled by future generations.

A neck of mutton boiled is always cut in chops. It is always jointed, and we all know to our cost how very little nourishment there is in it except for the capers and turnips, which make amends. A neck of mutton *unjointed*, roasted, “under-done,” and carved like a saddle, is every bit as good as a saddle in the estimation of most persons capable of giving an opinion on the subject.

When joints are carved on the table, it is best,

perhaps, to keep to tradition; but when they are not carved on the table, but outside the dining-room, where the party of guests is small, it is very easy to make a small leg of mutton do duty as a haunch, and a loin do duty as a saddle, without anyone being a bit the wiser; only in this latter case, whatever you do, pray do not forget to tell the butcher not to joint the loin.

Use of the Knife.—A good deal depends in carving upon the knife, and, of course, the carver must know how to use it. The knife must be drawn across the meat, with a very gentle pressure. If it won't cut, it too often means that the carver does not know how to carve. If you watch a stupid woman cutting bread, especially when attempting to cut thin bread-and-butter, you will see that sometimes she will make the bread crumble. If you press a very sharp knife downwards, without moving it sideways, it won't really cut unless the substance be of the consistency of butter. It is necessary to have a side action, corresponding to that of sawing. The blade of the best carving-knife, placed under a microscope, would become a very fine saw. There are few instruments sharper than a razor, and the reason a man does not cut himself when shaving, is that he never moves the razor, even the eighth of an inch, endways, but uses it really as a scraper. The slightest side movement cuts his chin.

A very good lesson in carving is to watch a man in a ham-and-beef shop, with a knife about two feet long, and half an inch wide the whole way down. How easily the slices come off, and how thin they are! It is really high art, and such carving requires practice. It is very foolish to suppose that people are stupid because they cannot carve as well as yourself. If you doubt this, show them how to do it with your left hand, and see what a mess you will make of it. Then ask yourself, is it that your left hand has never practised, or are you stupid?

It is impossible to enter into the details of how to carve the variety of joints of meat, of animals, such as hares and rabbits, also of birds, without diagrams, and these will be found later on, but a few further general remarks may not be out of place. First with regard to joints. Take a haunch of mutton. Be careful, in carving, to let the gravy settle in the meat. A spoonful of gravy—real red gravy—out of the well, is far too good to be lost. In a haunch of venison to lose it is an absolute crime.

Carve Fairly.—Again, in carving a sirloin of beef, there are two difficulties—the piece of gristle at the top, besides an awkward bone, which seems generally to be partially removable, and the end at

the bottom. A bad carver will often, thoughtlessly, dig out the red part, and leave the gristle sticking out at the top, and the end broad, out of all proportion to the rest of the joint. As a rule, servants are as imitative as monkeys, only (very often) twice as intelligent. The next time the joint appears on the table, the good housewife will wonder what a meal they have made. Probably they cut the joint on the same principle as was done upstairs, some sarcastic cook perhaps observing, "Well, master ought to know best; here goes." There is a memorable scene in history, where Betsy Prig observes to Mrs. Gamp, "Whatever you do, Sarey, drink fair." Our advice to the carver is based on this fundamental law of society—"Whatever you do, *cut fair*." There is no surer mark of a snob at a hotel, than to see him help himself to ribs of beef, and to confine his attentions entirely to the red centre, utterly ignoring, not only the end, but that long piece of meat, of the darker colour, which crosses the joint nearer at the top, with ridges of a still darker colour.

Poultry.—In carving poultry, a good deal depends upon whether the bird has to come to table cold or not. We will illustrate this point by describing a cold roast turkey. Now, cold roast turkey, with the green-looking veal stuffing, on one dish, accompanied by a juicy York ham on another, is a breakfast, luncheon, or supper, by no means to be despised; but a great deal depends upon appearances, and the appearances depend upon the carver. In carving a large turkey, leave the breast-bone clothed with a coating of white meat, if no thicker than a shirt-front, for the sake of appearances. It is only an idea; but, then, ideas are everything, especially in regard to clothing, and have been so, and will be so, ever since Adam and Eve. In carving a turkey, some persons, in their anxiety to carve the breast so as not to cut into the limbs, will destroy the joint for the next day. It is far better to cut lower down, into the wing. What you have to avoid is the bare bone itself, which looks like the skeleton of a dog at low tide. The same applies to a roast or boiled fowl. With regard to a goose, perhaps, it is more difficult. We can never recollect seeing a cold roast goose sent to table that did not, somehow or other, remind one of a perfect wreck. Perhaps colour has something to do with it; the white meat makes such a difference. It would be almost worth the experiment to whitewash the carcase of a goose, in order to gain information on this point. Probably, a cold duck that has been cut into is as bad as a goose. There are some joints that are absolutely hopeless served cold. Probably it is on this account that we never meet with them.

Who, for instance, ever saw a cold roast hare? It is as rare as a dead donkey. Yet every kind of game is *nice* cold—cold grouse, cold pheasant—we were going to add, cold woodcock; but, then; no one ever left a woodcock when hot!

Gravy.—In carving, a carver would do well to cast his eye upon the gravy, and a cook would do well to remember the carver in this respect. We have often called attention to the importance of not sending all the gravy to table with the joint, but reserving a portion to be sent to table hot, to be served with and assist the "second help." It is a pitiable sight to see an unskilled carver with a blunt knife, possibly a tough joint, and a dish so swimming in gravy that every effort causes a splash. Yet these things happen every day. They are trifles—unfortunately, life is made up of them. Of course, it is a great advantage to have a dish with a well; but when there is no well the operation of carving becomes very difficult, if the dish swims too full.

Another important point is the *size* of the dish. There seems to be an instinct among cooks—we can think of no other name—which impels them to pick the smallest dish possible for a joint, just as a setter sits down when he smells a partridge. The cook could no more explain the why and the wherefore than a dog. It is a way they have. This makes the carver's duty more difficult.

Attention.—The carver should also disabuse his mind of the idea that because he is a large eater, all the rest are large eaters; or, still worse, that because he is a small eater, all others are small eaters. Indeed, we may go farther. It is a fact—and if the reader is a close observer he or she will have seen it—that the same man will help, quite unconsciously, even his own family differently, if he comes home very hungry, to what he will at other times when he has no appetite. Probably the cure for this is, to give your mind to what you are about. We often hear children taught, "It is very rude to interrupt anybody when they are talking." It would be much more practical to invent another maxim, "It is very foolish to interrupt anybody when he is carving." We consider the act of cutting a cold silver-side of beef a solemn moment. Just think of the difference of the result, if the slice is the thickness of a five-pound note, from a jagged hunk cut the eighth of an inch thick! One means a good dinner; the other, what *might* have been a good dinner, in spite of all the pickles and salads in creation.

There are certain other rules and regulations settled for us in tradition. Mutton should be cut thick. Beef should be cut thin. Why, we cannot

say; but all this affords food for reflection. Even in cutting cold beef, the upper part of the beef would be cut thin; the under-cut, much thicker. Why, who can say?

We may ask ourselves again, is there, or is there not, any art in carving a beef-steak pie or a beef-steak pudding? Probably there is. A man with an artistic eye will place the piece of pie-crust with the shiny side uppermost. A man with no eye will often place it upside-down. It certainly rests easier this way, but then who on earth would hand round a plate of thin bread-and-butter with the buttered side downwards? The bad carving is too often simply want of thought.

The details of carving the different joints are explained fully by the following diagrams.



Fig. 1.—AITCHBONE OF BEEF.

Beef, Joints of.—Aitchbone.—This is an easy joint to carve. Thin slices should be cut from one end to another, commencing at A, and ending at B C. In carving for a family, the first few cuts will be in small pieces, which are usually a trifle over-boiled, as they are on the outside; and these should be placed in the dish and distributed equally, with a slice of the meat which is more juicy. It is a great waste to cut a thick slice at starting and leave it in

the dish, as is too often done, though this is the custom at restaurants. Care should be taken to cut evenly, and not dig out the under-done part in the middle and leave the ends.

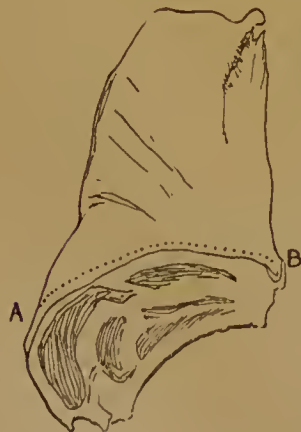


Fig. 2.—BRISKET OF BEEF.

Brisket.—Brisket of beef should be cut in thin slices right through from end to end, commencing at the line A B (Fig. 2). Like aitchbone, the first few cuts should, in carving for a

family, be equally distributed amongst all. Of course the outside is slightly over-cooked compared with slices cut later on. Brisket of beef requires a long and sharp knife, smooth slices being essential to the appearance of the plateful when helped.

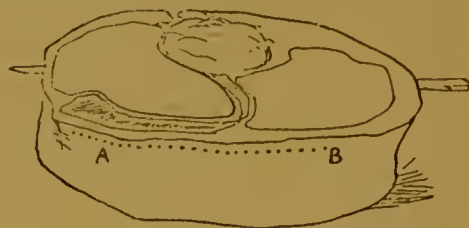


Fig. 3.—ROUND OF BEEF.

Round of Beef.—In carving a round of beef, it is necessary to cut off the small unequal projections till the joint becomes quite flat. Very thin slices should then be cut from end to end; and a long and very sharp carving-knife is necessary. In hotels and restaurants it is usual to cut a thick slice off first, and then to commence carving when the joint is flat. In families it is, of course, more economical to divide the first few unequal cuts among all present.

Sirloin.—A sirloin of beef may be divided into two parts—viz., the under-cut or fillet, and the top or rump. In families it is most usual to carve the under-cut first, and not to commence the upper part till the under-cut is finished. The reason of this is that the joint presents a far better appearance when sent to table cold. Often the under-cut, which is nicest eaten hot, is sufficient to dine a small family; and then the joint served cold, glazed at the top, and

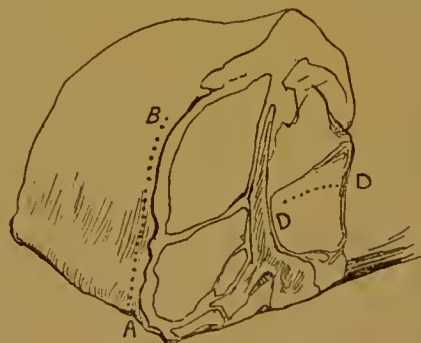


Fig. 4.—SIRLOIN OF BEEF.

on the uncut brown outside of a rich mahogany colour, and ornamented with bright fresh green double parsley, presents a really handsome appearance. We have known families, however, who preferred to reserve the under-cut for the second day's cold dinner.

The under-cut is carved across in rather thick slices cut down to the bone as at D D. The top or upper part is cut in thin slices, A B; and care should

be taken to keep it straight, and not dig out the tender part in the middle.

Blackcock.—A blackcock is generally carved like a grouse. Thin slices can be first cut off the breast by drawing the knife along the line A B, and



Fig. 5.—BLACKCOCK.

then the wings and legs can be removed afterwards like a fowl. In cutting a wing off a blackcock, the carver should try and get a strip of breast, though a thin one, to attach to it, as at c D. The knife should be inserted at c, and drawn backwards towards D, and the wing-joint then separated.

Brill.—A brill is usually carved the same way as a turbot. A cut is made from one end to the other along the backbone A B, which must go *right down to the bone*. Slices are then cut across, some on one side and some on the other, from D to E and D to C, also down to the bone. The fish-slice is then inserted at D D, taking care the slice touches the bone, and the slice of fish is lifted up carefully on the fish-

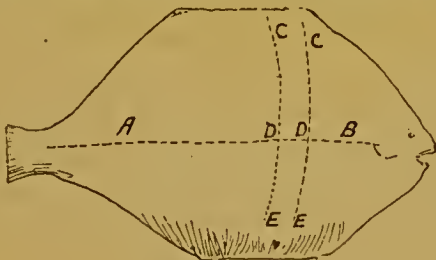


Fig. 6.—BRILL.

slice to prevent its breaking. Should the whole of the top be finished, it is best to cut through the bone in two places and remove the spine, and then cut the fish in slices underneath. This is far better and neater than turning the fish over.

Calf's Head.—In carving a calf's head it is customary to commence by cutting slices from one end of the head to the other, and right down to the bone, along the lines shown in the diagram by A B. A slice of what is known as the throat sweetbread, and which is at the neck part of the head, can be served with this. In taking out the eye, which many consider a tit-bit, bring the knife round the circular dotted line at E. To do this, insert the knife in a slanting position at r, and keep the point of the knife underneath the centre of the eye while the knife is brought round. In removing

the lower jaw, commence at a. To do this, turn the dish. Most persons prefer thin slices of what is known as the horn part. These are cut at c to D.

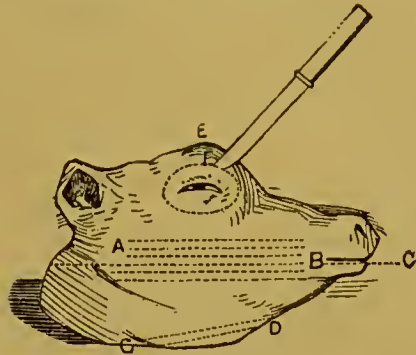


Fig. 7.—CALF'S HEAD.

The tongue and brains are usually served on a separate dish.

Cod.—In carving a codfish, whether the fish be whole or only a part served—such as a cod's head and shoulders, or a tail-piece—it is best to make one cut from the head towards the tail (or *vice versa*) down to the bone, A B; and then cut slices across from this line to the side, C C, D D. Codfish is very apt to break into flakes; and when it does, these flakes should be lifted by the fish-slice, and one or more served to each person according to their size.

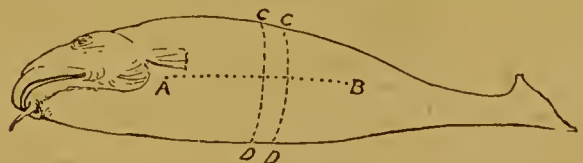


Fig. 8.—COD.

A piece of the sound and liver should also be served with each help; and when only a small piece of liver is sent to table, as is too often the case, the carver should bear in mind the number of persons to be helped, and give a small piece in order that it may go round equally.

Duck.—In carving a duck, a good deal depends upon its size and fatness. A large fat duck, with plenty of meat on the breast, is usually carved like a goose—viz., some thin slices are cut off the breast. The duck is turned endways towards the carver, the wings nearest and the legs furthest from him. In cutting slices off the breast, the knife is drawn from B to A. Next the wings are removed, the knife being drawn from C to D; and the carver should endeavour to leave part of the side of the breast attached to the wing. Then the legs are removed. Then the neckbone or merrythought, as

it is sometimes called; and then the whole breast-bone is separated from the rest by cutting through



Fig. 9.—Duck.

the sides. The backbone easily divides in two by being pressed downwards.

When a duck is poor and skinny, it is best to cut off the wings at starting, as slices off the breast only betray the poverty of the bird. A small quantity of seasoning should be served with each portion. For this purpose the skin should be cut across between the legs, and a spoon used.

Fowl.—A boiled fowl is carved similarly to a roast one. Care should be taken to cut plenty of the white meat of the breast off with the wings, the knife being inserted at A and brought back to B



Fig. 10.—FOWL.

with a steady cut. The knife should be drawn, and much downward pressure avoided, as the boiled white flesh is apt to crumble. It is best to turn the front end towards the carver. Some persons remove the legs before they cut off the wings. To remove the leg and thigh, insert the fork into the leg, and the knife underneath, and then raise the leg away from the remainder of the bird. Common-sense will then show the carver where to cut, as a sort of elastic skin only causes the leg to adhere. The thighbone will now leave the socket, and a very little assistance of the knife is necessary to free the leg. The neckbone is next removed, and then the breast separated from the carcass by cutting the thin rib-bones through on each side. The liver-wing and breast are generally esteemed the best parts; after that, the other wing, to which the gizzard is generally attached. A large boiled fowl is often carved like a turkey. (See TURKEY.)

Goose.—In carving a goose, the first endeavour of the carver should be to cut as many slices as possible off the breast; and to accomplish this purpose the meat attached to the wings must be sacrificed, as a "wing of a goose" is never served in one help, like the wing of a fowl. The goose should be placed with the wing end nearest the carver, who must cut thin slices down to the bone from A to B. If the party be small, the breast will be sufficient as a rule, without touching the limbs. In cutting off the wings, cut from C to D, and then bring the knife



Fig. 11.—GOOSE.

through the joint. To separate the legs, turn the goose on its side, bring the knife sideways and as near to the carcass as possible, and cut sideways till stopped by the bone. Then raise the leg with the fork, and it will be easily separated from the socket. The legs are generally reserved to the last, whole, as they make an excellent grill. The stuffing is taken out with a spoon from the inside, through a cut with the knife across the goose at A A.

Grouse.—A grouse may be carved in several ways. When there is ample for all, the grouse can be simply cut in half by inserting the knife-point downwards near the "leg" end of the breast, and splitting the breastbone in two, close along the keel, and at the same time cutting through the back. When only small portions are served, it is best to cut the grouse up into small joints, carving it like



Fig. 12.—GROUSE.

a fowl; or a few slices may be cut from the breast at A B before taking off the wing at C D. Some portion of the back should be served with each joint, as the back (containing the black part) is usually esteemed the best.

Ham.—Many persons think it more economical to carve a ham by cutting slices off the extreme end of the knuckle and gradually cutting into the ham, leaving the knuckle-bone bare. The most usual way of carving a ham, however, is to make a cut along the line A B, and then cut thin slices down to

the bone on the opposite side to the knuckle, gradually making the space between *AB* and *CD* larger and larger. When a ham has been cut into, so that the portion between *AB* and *CD* has been cut away, it may be said to be in its prime for carving, as a ham

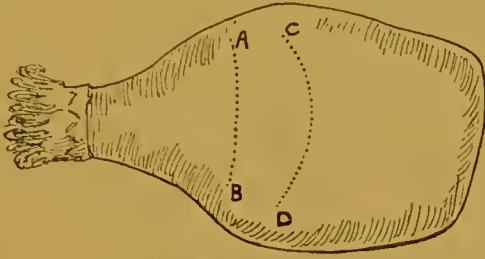


Fig. 13.—HAM.

is best when long thin slices can be cut off with a thin sharp knife. An experienced ham-carver likes a knife which is worn down narrow as well as thin; by a peculiar knack the steel then bears against the meat by its own spring, and persuades off slices of wafer-like thinness. The knuckle should always be ornamented with a paper frill.

Hare.—The only difficulty in carving a hare is experienced in separating the joints from the body, which when the hare is old, and perhaps in addition somewhat under-done, is often a work of some diffi-



Fig. 14.—HARE.

culty. At the commencement cut slices from the back sideways along the line *AB*, serving the seasoning from a slit which is easily cut in the side. Next remove the hind legs, which generally come off easily, as they can be pulled away from the body by the fork, which shows the carver where to insert his knife. The hind legs are by some esteemed the best portion of the hare. In cutting off the shoulders, draw the carving-knife along the line *CD* and cut down, and the joint will be easily found. The head can be split open by using the point of the knife and pressing downwards, and the half-head can be served with a slice of the back, the brains being by many esteemed a delicacy.

Lamb.—The first thing to do in carving a fore-quarter of lamb is to separate the shoulder from the

other part. This is done by cutting with the knife round the outside edge of the shoulder along the line shown in the diagram by *AAA*. The shoulder is usually placed on another dish, and some lemon-juice squeezed over the breast. The lemon is often dipped first in cayenne pepper. The ribs are then separated from the brisket, and the former cut through; *vide* the line *CB*. It is usual to ask the guests whether they prefer ribs or brisket. The



Fig. 15.—FORE-QUARTER OF LAMB.

shoulder is rarely cut when hot, as few would choose it in preference to the other portions named.

Other joints of lamb, such as the leg, neck, &c., are carved exactly as the corresponding joints of mutton.

Landrail.—The landrail is carved like a snipe—*i.e.*, either served whole, or cut in half longways



Fig. 16.—LANDRAIL.

through the breastbone and back. When carved into joints, it is best to cut off the wing with as much of the breast adhering to it as possible, by drawing the knife along the line at *AB* in Fig. 16. The remainder of the breast will make another portion.

Mutton, Joints of.—*Haunch.*—A haunch of mutton is by no means a difficult joint to carve. The chief point to be borne in mind is not to let

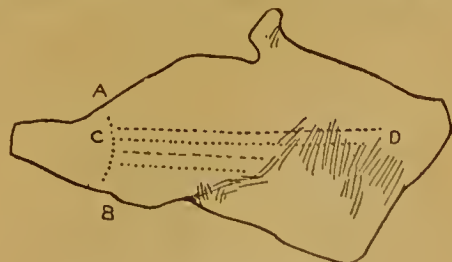


Fig. 17.—HAUNCH OF MUTTON.

the gravy run out of the meat. At starting, a cut is made across the joint, shown by the line *AB* in the diagram; only this cut must not extend to the outside of the joint too deep, but be dug out, as it were, by the point of the knife. The cut must not be more than an eighth of an inch deep at *A* and *B*, though the knife may go down to the bone in the middle of the cut. Next proceed to cut slices out of the joint in the direction of the lines *CD*, starting from the cut already made. The part of the joint at *D* contains the fat. After several slices have been cut, the hollow part at *C* will be found, if the joint is properly roasted and not over-cooked, to contain red gravy out of the meat. This hollow part is called the well. A spoonful of this gravy should be served with a slice of meat as long as practicable.

Leg.—A leg of mutton is usually carved by cutting



Fig. 18.—LEG OF MUTTON.

slices in the direction *AB*, shown in the diagram. The slice containing the piece of fat and kernel known as the Pope's eye is esteemed the tit-bit of the joint. When joints are cut outside the room, a leg of mutton can be carved by cutting slices parallel with the bone. When this is done, it has all the appearance of a haunch, and practically is the same thing. At a dinner-party for twelve persons, where there are fish, soup, entrées, joint, and game, a small leg of mutton will be ample carved haunch-fashion, and is more economical, as very often after a dinner-party there is a glut of cold meat.

Loin.—The most economical way of carving a

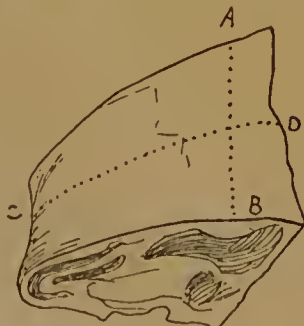


Fig. 19.—LOIN OF MUTTON.

loin of mutton is to cut it like a saddle, by taking slices along the line *AB*. The end can be cut off before roasting, as already explained, and will make a nice Irish stew. When to be carved this way, however, be sure and tell the butcher *not to joint* the meat, as each chop makes a gash in the meat, and lets out the gravy. Too often the loin is jointed, or

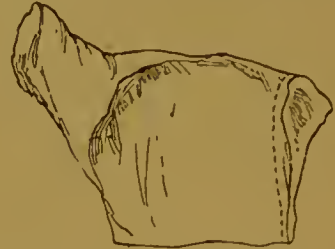


Fig. 20.—NECK OF MUTTON.

supposed to be jointed, and it is then carved in irregular chops in the direction of the line *CD*. When this is done, too generally the end is left on the plate, and the bone as well, only half-picked; and, in fact, more of the joint is thrown away than eaten.

Neck.—Neck of mutton is usually boiled, and then carved by cutting it into chops, as shown in the dotted line, and into pieces, by bringing the knife between the bones, at what is known as the scrag end. When the best end of the neck is roasted (and this forms an admirable joint for two or three persons), it should, however, be carved like a saddle of mutton, and the neck should not be jointed by the butcher. (See remarks above on carving the loin.) When carved thus, there are no bones left half-picked on the plates, and the bones left on the dish will do for the stock-pot; while the scrapings, &c., will make a dish of mince.

Saddle.—A saddle of mutton is carved by cutting thin even slices on either side of the centre bone,

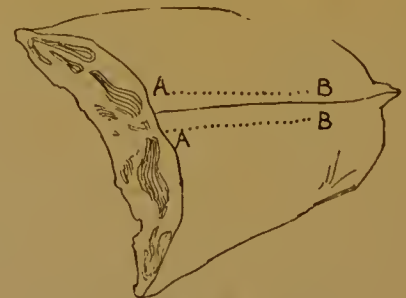


Fig. 21.—SADDLE OF MUTTON.

along the lines shown in the diagram by *AB*. It is best to have relays of *very hot* gravy served separately, as saddle of mutton very soon gets cold. The dish in which it is served, as well as the plates, should therefore be *very hot*.

Shoulder.—This is an easy joint to carve as long

as you commence on the right side. It is safest to stick the carving-fork right through first. It will on one side touch the bone, and on the other go

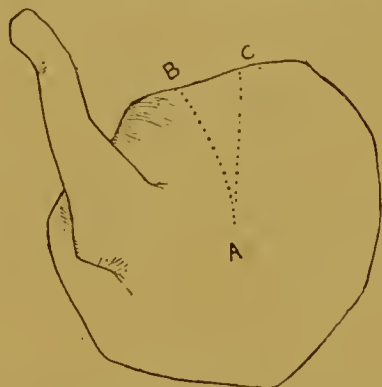


Fig. 22.—SHOULDER OF MUTTON.

through. This latter is the side to cut, and after one cut is made (A B) the joint will open of its own accord, and leave an open space shown by the triangle A B C. Now proceed to cut slices along the lines B A, C A, till the bone is reached, when the joint can be turned over, and the underneath part carved like a round of beef by cutting slices off horizontally.

Partridge.—The proper method of carving a partridge is to cut it in half lengthways, right through the breastbone and back, as close as pos-



Fig. 23.—PARTRIDGE.

sible to the keel, and give half a bird to each person. When only small pieces can be given, it may be cut exactly like a fowl, cutting the line along A B with some breast-meat attached. The breast of the partridge is most highly esteemed.

Pheasant.—A roast pheasant is carved exactly like a fowl, or slices may be cut off the breast as at A B before the joints are taken off at C D. When it



Fig. 24.—PHEASANT.

has been hung some time, the thigh is usually considered the best part. It is best to serve some portion of the back, containing "black pickings," with the wings, breast, and merrythought, as without this the white meat is somewhat tasteless.

Pigeon.—A pigeon should usually be cut in half right through the breast and backbone, and half a



Fig. 25.—PIGEON.

one makes by no means too large a help for each person; or the joints may be taken off at A B, when the breast will make a separate portion not to be despised in case of a large runt.

Pork, Joints of.—Leg.—A leg of pork is carved like a leg of mutton, by cutting slices along the line A B. When the crackling has been scored, the knife should be passed along the lines thus made, and a piece of crackling served with each help. When

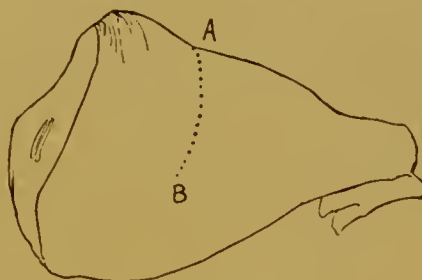


Fig. 26.—LEG OF PORK.

stuffing has been put with the joint under the skin, the carver should ask if stuffing is liked, as many persons object to the flavour of onions. Sage-and-onion stuffing is best served separately in a sauce-tureen, as well as apple-sauce, and some very hot gravy.

Loin.—Loin of pork is always jointed and cut in chops from A to B—those containing a piece of the kidney being considered the best. When it

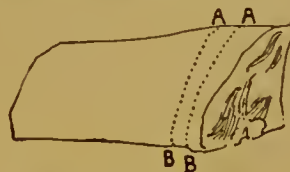


Fig. 27.—LOIN OF PORK.

is stuffed, the carver should ask if stuffing is liked. The stuffing is best served separately, as well as apple-sauce, and good hot gravy, in tureens. A piece of crackling should be given with each help.

Quail.—Quails, like partridges and pigeons, are



Fig. 28.—QUAIL.

best carved by being cut in half right through the breast and back, cutting down close to the breast-bone; and each half, with a piece of toast underneath, on which they are served, forms one help.

Rabbit.—The best way to carve a rabbit is to cut it across the back through the backbone in the direction A B, C D. The joints are then more easily

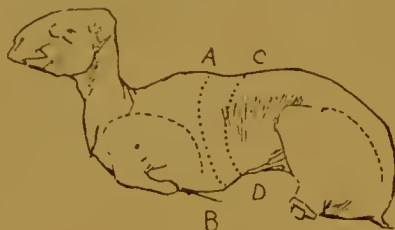


Fig. 29.—RABBIT.

separated from the remainder of the carcase, the knife being drawn along the dotted lines shown in the diagram.

Salmon.—In carving a salmon, draw the fish-slice along the centre of the fish right down to the bone from head to tail, A B. Then cut slices from the

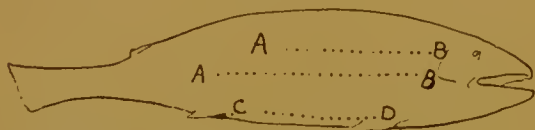


Fig. 30.—SALMON.

centre, and add to each slice out of the middle a small slice of the thin part shown by the line C D.

Soles.—An ordinary-sized sole is generally cut into three pieces by cutting it across along the lines A B, C D. A small sole is cut across in half.

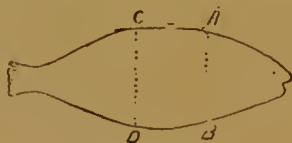


Fig. 31.—SOLE.

A very large sole, such as those generally used in *sole au gratin*, is cut like a salmon, by drawing the fish-slice from head to tail down the centre, cutting down to the bone, and then lifting slices on each side, thus avoiding the small bones that edge each side of the fish.

Sucking-Pig.—A sucking-pig is sometimes sent to table whole. When served this way, cut off the head, A B, Fig. 32, and then split the pig into two

parts longways, Fig. 33, right down the centre of the back, from neck to tail. Next cut off the



Fig. 32.



Fig. 33.—SUCKING-PIG.

shoulder by bringing the knife round by the dotted line shown at C. The hind-leg can be taken off by bringing the knife round the line shown at B. The ribs can now be easily cut through as at A. In helping, care should be taken to give a portion of the "crackling" or brown skin with each help. The ribs of a sucking-pig are generally considered the best parts.

Tongue.—There are two ways of carving a tongue. In one case slices are cut out of the centre by cutting down along the line A B, and not cutting lower than three parts down the tongue. Another way is to cut the tongue right in half, and then cut thin slices off each half.

In any case, a slice of fat should be cut off the root of the tongue and placed with each slice of lean.



Fig. 34.—TONGUE.

Turbot.—First cut with the fish-slice a long cut right down to the bone from head to tail, a b. Then

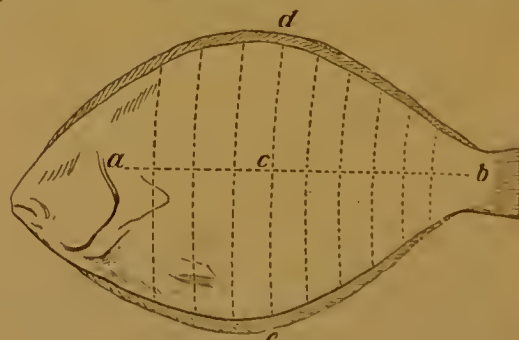


Fig. 35.—TURBOT.

cut slices sideways, *cd, cc*, &c.; and by keeping the fish-slice close to the bone bring out the slices without breaking them. These pieces are shown enclosed in the diagram by the dotted lines on each side of the line *ab*.

Turkey.—In carving a turkey, the chief endeavour should be to obtain as many slices as possible off the breast. Slices can be cut from 2 to 3, the seasoning being in the neck part between 4 and 3. The meat can be cut off close down to the wing-bone, as low as the line 5 6, or even lower.

It is best to avoid leaving the breastbone too bare, and the point at 7 can have a little meat left adorning to it, as it looks far better so when it is cold. The legs, and especially the drumsticks, make a good devil. When the thigh part is required to be eaten hot, the drumstick, 1 to 9, can be separated from the thigh, 9 to 10, and the meat on the thigh

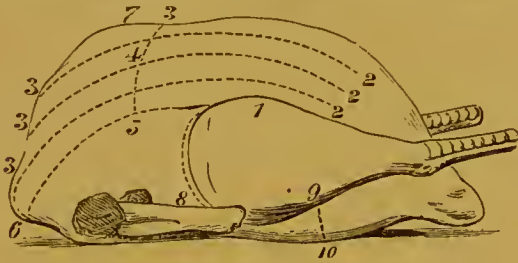


Fig. 36.—TURKEY.

cut off; but when not wanted, the leg is best removed whole. The wing-bone, 8, and joint can be devilled with the drumsticks, as they are somewhat gristly when eaten hot.

Veal, Joints of.—*Breast.*—In carving a breast of veal, a good deal depends upon the skill of the butcher in jointing it. When the ribs have been broken across, it is best to cut one long slice along the joint, shewn in the diagram at *A B*. The brisket

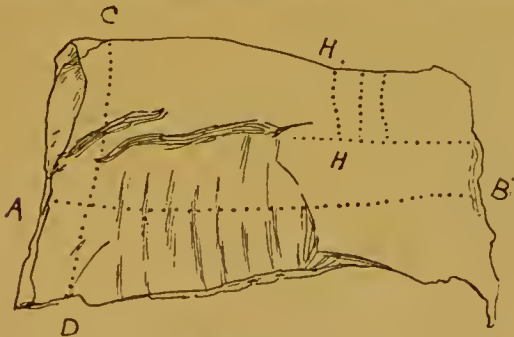


Fig. 37.—BREAST OF VEAL.

is chiefly gristle; but unless the rib-bones have been broken across, the ribs will have to be served whole, which makes the help a somewhat awkward one. It

is often best to cut a rib right through from *c* to *n*, and then divide the broken bone where it crosses at the line *A B* afterwards. Short slices, *u u*, can be cut quite through where the joint contains gristle rather than bone.

Fillet.—A fillet of veal requires principally a very sharp, long, thin knife. The first few slices off the top should be equally divided, when carving for a family, amongst all present. The meat has a tendency

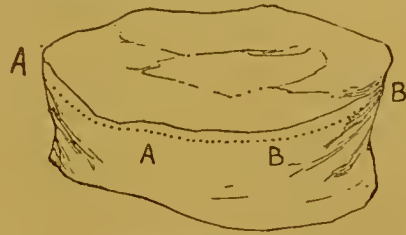


Fig. 38.—FILLET OF VEAL.

to break or crumble, and the only remedy for this is a thin *sharp* knife, which must be drawn lightly across the meat without too much pressure. It should be cut perfectly evenly through the line *A A*, *B B*; and when once the joint has been got quite flat at the top, should be kept so. A piece of stuffing should be served with each help; and as some of the stuffing usually falls off into the dish with the first few cuts, the carver should keep this in reserve for the time when there is less stuffing, as he cuts lower down into the joint.

Knuckle.—A knuckle of veal is simply carved by cutting thin slices off the end along the line *A B*.



Fig. 39.—KNUCKLE OF VEAL.

The carver should cut down to the bone, and occasionally trim the centre by cutting along the bone, and round it, horizontally.

Loin.—A loin of veal is carved exactly like a loin of mutton that has been jointed—that is, it is cut into chops along the line *A B*. When the loin is large, one chop will make two small helps. In this case the under-cut, which is the more tender part, should be put with the end, and the bone and upper part left together. When the loin contains the kidney,

a portion of kidney should be given with each help.

The most economical way of serving loin of veal is

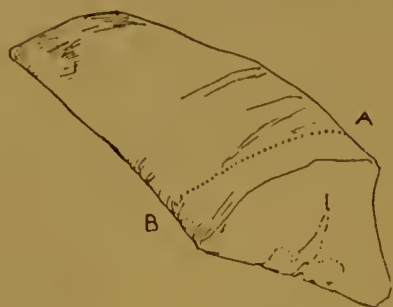


Fig. 40.—LOIN OF VEAL.

to bone and roll it. It can then be cut through in thin slices like a fillet.

Venison, Joints of.—*Haunch.*—A haunch of venison is a rather rare and expensive dish, and is more often carved off the table. The directions for carving a haunch of mutton can be carried out in every detail. Should a second help be required, be sure and see that it is served on a fresh clean plate, *very hot*, and also that some good strong but not too highly flavoured hot gravy be always ready while the joint is on the table.

Perhaps the best lesson in carving is to watch the carver at Simpson's, the only place in London where a haunch of venison is served daily during the season. In making the first cut, A B, see that the

outer part is not cut through. The longer slices, C D, contain fat at the D end. The outside knots of brown fat are also considered great delicacies.

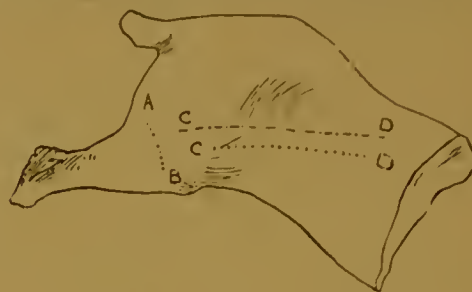


Fig. 41.—HAUNCH OF VENISON.

Neck.—A neck of venison is an admirable joint for a small party, where a haunch would be too large. A neck kept exactly long enough, but not too long, is equal in flavour to a haunch. The neck should, however, never be jointed; this absolutely ruins it.

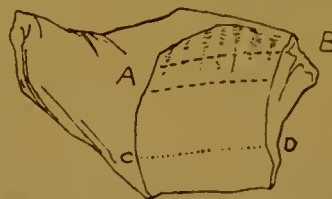


Fig. 42.—NECK OF VENISON.

It must be carved saddle-fashion, and cuts must be made in the direction of the line A B, and slices of fat can be cut lower down along the line C D.

LEAKAGES IN THE HOUSEHOLD PURSE.

It is a great disappointment to housekeepers who have determined to manage their income according to a plan, and to bestow forethought and consideration upon expenditure, to discover how many leakages there are in the purse which holds the money of the household. It is indeed these leakages which make calculation difficult. The mistress draws up a careful estimate of how much it will be reasonable to spend on the food of the family; she sets aside a certain amount for every other item which she can remember; she provides (so she thinks) for every emergency likely to occur; and with all this she believes she is keeping well within bounds; but when the time comes for her to compare what has actually been spent with what she thought would be spent, a leakage is discovered. It is found that an entirely unexpected cause of expense has arisen; an outlay which probably ought not to have been needed has been made; and this outlay interferes with all

her arrangements, and makes her well-made schemes "gang all agee." What, then, is to be done with regard to these leakages?

The only thing which can be done is to be prepared for them, to provide for them, and, as far as possible, to prevent them. So much, however, are they a matter of course, that a great many housekeepers, when drawing up their plan of expenditure, put down a certain sum for "sundries," and then transfer all these leakages to this account. The plan is a good one, but it must not be abused; and the objection to it is that it is very open to abuse. It cannot be too often repeated that "economy comes from constant niggling at small things." Housekeepers who find it necessary to study economy are sometimes very unwilling to believe this. They would like to economise in a bold, effective way; they have no patience for the constant niggling; they want to have everything, and do

without nothing; and they lose heart when they discover that to make a limited income cover necessary expenditure, they must perseveringly be on the alert, and continually cut down expenses which overlap, by even a little, the prescribed line. Yet for the majority of people this is the only way to success.

To provide liberally for "sundries," and arrange for a wide margin of expenditure, is to take excess and overlapping as a matter of course; and this is decidedly dangerous. A small margin the housekeeper must unquestionably have, because even the best manager cannot provide always for the unexpected: besides which, without a margin it is impossible to save money by buying in quantities, or by being on the alert to take advantage of the market. The possession of a little ready money, which is not appropriated, is a great aid to economy, as it gives freedom and power, and it saves the owner from being thrown into difficulties because unexpected demands are made upon the purse. Housekeepers who desire to live economically but comfortably, should therefore make a most determined effort, by denying themselves something which they would like to have, to set aside this marginal fund; and when it is once formed, to keep it always up to a given sum, replenishing it at regular intervals, when the income is received. By this means only can they be prepared for leakages.

After preparing thus for the inevitable leakages and demands on the purse, the next thing to do is to *prevent* them as much as possible. This can only be done by constant care, watchfulness, and supervision. This watchfulness is tiresome without doubt, but it is necessary; indeed, where it can be exercised, it very often makes all the difference in a small family between extravagance and economy. The difficulty, however, which inexperienced mistresses have to face, is that they scarcely know what details to watch. If they realised where leakages were most likely to break out, they might be on their guard against them, because to be forewarned is to be forearmed; but not knowing, they can only be generally careful about everything. For the benefit of housekeepers thus situated, the following reminders are given. It must, however, be understood that they are intended only for those who feel that it is absolutely necessary to save; who are firmly resolved to save; and who are, therefore, not disposed to despise the humblest efforts in this direction; for the methods here recommended are very homely and very obvious. It is true that they cannot be neglected without loss; indeed, it is probable that attention to them makes much difference between extravagant and economical living. There is an old proverb which says that "if a man would become rich, he must first ask his wife's

leave." To take steps to stop the leakages through which the income runs away is one of the most effectual ways in which a wife can give this "leave" to her husband.

Waste.—The chief cause of unnecessary expense in housekeeping is waste. This is the great foe of the economical housekeeper, but it has so many shapes that it continually eludes her. While she is congratulating herself that it is well in hand in one direction, and is to be destroyed, it appears in some other form in another part of the house, and accomplishes its work of creating anxiety and misery in the future. How, then, is she to prevent waste?

For one thing, she must constitute herself her own household inspector, and every day go through every department of her house, taking note of what is going on there. The mistress who puts her hand to household work would naturally do this; but even the mistress who has servants to assist her, ought not to leave it undone. It is the only way to prevent abuse. "The eye of a mistress," it must be remembered, "is worth two pairs of hands;" and the mistress who understands what ought to be, taking kindly but careful note of every lapse therefrom, will be able to discover waste in its beginning, and to put an end to it before it has time to become serious.

In paying these visits of inspection the mistress must not limit herself to the show-rooms of the house, the bedrooms and the sitting-rooms; but she should acquaint herself with the condition of the kitchen, the scullery, the larder, and the offices; while last, but not least, *she should look into the dust-bin*. This duty may not be agreeable, but it is most important; because, if waste is occurring, the proofs of it are almost certain to be found here. Sometimes housekeepers say that they cannot help odds and ends of various kinds being thrown into the dust-bin; and that if servants are tolerably trustworthy, and do their work fairly well, it is best to let an evil of this kind go, and shut their eyes to it. But this is absurd. Either a housekeeper is the mistress in her own house, or she is not; and if she cannot arrange that her wishes shall be carried out in small details, she had better retire at once from the situation, and confess herself a miserable failure. If she is not ready to do this, she must make up her mind as to what is right and proper, and then see that it is done; but she must on no account content herself with merely saying that she wishes so-and-so, and then leave things to go as luck will have them; she must investigate affairs, and make sure that her rules are obeyed. This it will be quite possible to do without any "nagging," or unreasonable troubling of the servants, by simply making a practice of

knowing how things are, and where things go. If this practice is kept up regularly, and is part of the ordinary routine, not taken up occasionally by fits and starts, it will be accepted as a matter of course, and create no disturbance whatever.

We all remember the story told by Thackeray of how he "once walked through a splendid English palace, standing amidst parks and gardens, than which none more magnificent has been since the days of Aladdin, in company with a melancholy friend who viewed all things darkly through his gloomy eyes. The housekeeper, pattering on before from chamber to chamber, was expatiating upon the magnificence of this picture, the beauty of that statue, the marvellous richness of these hangings and carpets; the admirable likeness of the late marquis, by Sir Thomas; of his father, the fifth earl, by Sir Joshua, and so on; when, in the very richest room of the whole castle, Hicks, which was the melancholy companion's name, stopped the dame in her prattle, and said, in a hollow voice, 'And now, madam, will you show us the closet where the skeleton is?'"

The Dust-Bin.—A skeleton, when it exists in a household, is generally put away in some dark out-of-the-way place; and there is no denying that in many and many a household the gruesome skeleton of domestic mismanagement and waste is hidden away in the dust-bin. Therefore the housekeeper who wants to get rid of it, and to banish it altogether from her domain, must seek it here, and cast it out. Let the light and fresh air visit the spot, and no longer allow it to remain in its hiding-place. She may be fairly satisfied that if she can banish the skeleton from this place; can order matters so that no animal or vegetable refuse of any kind, no vegetable trimmings, no odds and ends, no cinders, no scraps of meat or fat, no bacon-rinds, no potato-parings, no egg-shells, no bones, no offal, no fat, no orange-peel, no tea-leaves, no crusts of bread, nor any other of the hundred-and-one articles of litter which are too often found in this useful but much-abused receptacle, are thrown there; but that dry refuse only, the ash-dust left after cinders have been sifted, shall be permitted in the dust-bin, while all other refuse which cannot be used, shall be burnt in the kitchen-fire; she will have done much to banish the skeleton of waste from the household altogether.

For it is to be noted that almost all the items which find their way improperly into a dust-bin *are associated with waste*; and if all housekeepers could be persuaded to do what is here recommended, and regularly inspect their own dust-bins, there is not much doubt that some of them would before long arrive at the opinion that a large portion of the

"refuse" which finds its way there is not refuse at all, but is good material thrown to waste. As the old proverb says, "An extravagant servant can throw out by teaspoonfuls much faster than the bread-winner can bring in by tablespoonfuls." Cleanliness is one of the first of domestic virtues, and it ought to be observed most scrupulously; but cleanliness and thrift are not opposed, and pounds a year might be saved in many a household if the scraps and trimmings, the odds and ends, which are now thrown away, were used and made the most of. Enough has been said in another series of articles of the economy of utilising scraps and fragments. Therefore it will not be necessary here to speak of the use which may be made of bones, fat, vegetable trimmings, and other oddments suitable for the stock-pot; but of some of the other items mentioned a word or two may be useful.

Bacon-Rind and Dripping.—The value of ham and bacon in making stock for soup and sauce is much appreciated. It is not generally known that the rind of bacon is particularly rich in the peculiar flavour required; and if it is scalded, and scraped to make it thoroughly clean, it can be used for this purpose, and thus the purchase of ham or bacon for flavouring can be saved. It is said that French cooks always use bacon-rind for flavouring. Bacon dripping also is frequently wasted in English kitchens. It is, however, most valuable for basting poultry, and game, and veal, and it is not to be despised as a medium for making pastry for meat-pies. Many children also are particularly fond of it, and if allowed to dip their slices of bread into the dish whilst it is hot, in many cases the butter for one or two children may be saved at breakfast where bacon is eaten by the elders.

Potato-Parings.—When waste is permitted in a household, one of the surest signs thereof is that potatoes and apples are thickly pared, so that the knife slices off a large portion of the root with the skin. This is a detail which housekeepers ought to look into very closely. The part of a potato which lies near the skin is the most nourishing, and the least watery; and therefore those who pare it thickly, pare away the best of the root. When the habit is once acquired, it is just as easy to pare a potato and an apple thinly as to pare them thickly; and the saving thus effected is considerable, because the waste, if permitted, is repeated day after day. Even when potatoes are economically pared, the parings ought not to be thrown into the dust-bin; they ought to be burnt, and they make excellent fuel for the copper fire. It should not be forgotten, also, that potato-parings, if boiled daily, furnish wholesome and valuable food for poultry. Potato-paring machines, which brush away the potato-skin, are

now used in many households; and when they are employed, much waste is avoided. When these machines are not available, the most economical method of dealing with potatoes is to cook them in their jackets, and peel them afterwards. It has been calculated that when potatoes are cooked in their skins, one potato in sixteen only is wasted; when they are peeled before being boiled, one potato in eight is wasted; and if they are extravagantly peeled, the waste will be much greater.

Amongst the other articles frequently found in dust-bins are orange-peel, fat, bread, tea-leaves, egg-shells, and trimmings. Not one of these has any right to be there. Orange-peel, if dried gently in the oven, makes excellent fuel for lighting fires, and saves wood. Tea-leaves ought to be washed and drained, then sprinkled upon carpets that are to be swept, to prevent the dust rising. Egg-shells are useful for clarifying soup and jelly. If not wanted for this purpose, they should be burnt. Fat, bread, and trimmings are not refuse; they are valuable food-supplies, and ought to be utilised to the uttermost. Housekeepers ought not to forget, however, that when scraps are wasted, the reason very often is, not that people want to waste, but that they do not know how to avoid it. It requires both knowledge and skill to make the most of scraps. The achievement is, however, productive of so much economy, and it also makes such a pleasant variety in the daily fare, that any housekeeper would be repaid who studied it. Hints which will help the study are given in many other chapters of this work.

Cinders and Economy of Fuel.—The presence of cinders in a dust-bin is a sure sign that waste is going on. Cinders ought never to be thrown into the dust-bin, for they ought to be burnt to the last fragment. They make an excellent fire—bright, clear, and free from blaze, and particularly suited for broiling, and for burning refuse. One of the difficulties associated with the burning of refuse is that servants say they cannot dispose of it thus because it makes a bad smell. If, however, the mistress will insist upon having it burnt in small quantities at a time, as it is produced, have it put on the fire when the latter is low, but before it gets dull, and then covered with cinders and a little damp coal-dust, and it will burn away without causing any bad smell. It is when rubbish is allowed to accumulate, and when the attempt is made to burn a quantity at once, that the fire goes out, and an unpleasant odour is created. With a little management, everything that cannot be used may be burnt either at the copper fire or the kitchen fire—bones (broken up), tea-leaves, fragments, and everything else; and as a result, instead of bad smells being produced, they will be avoided; be-

cause damp refuse put into a dust-bin very speedily ferments or decomposes, and causes a smell which is dangerous as well as unpleasant, and is the cause of cholera and typhoid; while refuse burnt is rendered quite harmless.

Waste of Fuel.—The duty of making the most of cinders is, we must remember, closely associated with the duty of being provident with regard to fuel; and every housekeeper knows that watchfulness and care in this department do wonders in the way of regulating the consumption of coal in the household, while the extravagant use of coal is one of the “leakages” to be specially dreaded. Some people seem to think that everything has been done that can be done to prevent unnecessary outlay in this direction when arrangements have been made to get in a large supply of coal at the end of summer, when coal is cheap, for use in the winter, when it is dear. The judicious purchase of coal makes a saving without doubt, but it by no means exhausts the possibilities of the situation. Economical housekeepers will, therefore, always keep a strict watch over the use of the contents of the coal-cellar.

A very effectual means of preventing waste of fuel is for the housekeeper to be very particular about the choice of coals. If there are two coal-cellars attached to the house, it is well to have a hard, slow-burning sort of coal in one cellar for kitchen use (especially in kitchens where kitcheners and close stoves are fixed), and a bright-burning sort for consumption in sitting-rooms and bedrooms. Hard, slow-burning coal, it should be remembered, generally makes a good deal of ash, and it is, therefore, most unsuitable for sitting-rooms; yet what is known as “best coal” is equally unsuitable for burning in a kitchen, because it burns very quickly, and it gives out so fierce a heat that it burns the bars and cracks the fire-bricks. This provision of the right kind of coal for the different ranges is a very important detail of economical management.

There is very little coal which can be chosen that does not consist more or less of coal-dust; even the very best and highest-priced coal has usually a little dust belonging to it; and how to prevent small-coal being wasted is a great problem with many housekeepers. In households where coal is extravagantly burnt, it sometimes occurs that dust is allowed to accumulate until the cellar is half full of small, and then fresh coal is ordered, when the “nubbly bits” are burnt, because it is said there is “nothing but dust, and no one can keep a good fire with nothing but coal-dust.” This is quite true; and yet coal-dust judiciously used makes coal burn much longer than it otherwise would, and therefore its employment tends to

economy. What housekeepers have to aim at is that coal-dust should be burnt *with* the supply of coal to which it belongs, so that it shall never accumulate. Mistresses who are determined to economise should give up the idea that dust is to be burnt only in the kitchen, and that knobs only should be brought into the rooms. The servants who try to burn coal-dust to advantage, as the housekeeper who has to pay for it would do, are few in number; and even where they exist, they find it difficult to cook with dust. Therefore, if coal-dust is to be used, not wasted, the housekeeper must look after it personally. In small households, where the mistress mends the fire herself, and does not ring the bell for the servant to do it for her, this is a very simple affair; let her keep a supply of small in a special receptacle; then, when the fire is burning brightly, lightly sprinkle a shovelful gently over the top, letting it drop between the cinders and fill up the hollows beneath. It will help to keep up the heat of the fire, and also to consume smoke. To mend a poor fire with coal-dust is hopeless; it either puts the fire out, or makes a good fire an impossibility for a while. Coal-dust is chiefly useful to keep up a *good* fire; and if this fact is borne in mind it will be quite easy to burn the coal-dust with the coal, and so let both come to an end together. The mistake usually made is that people burn all the large-coal at first, and then they try to burn all the small-coal and dust, and this makes a bad fire. Sometimes housekeepers try to make the most of dust by mixing it with water to make it cake, and this plan answers for a fire that is to be kept in a long time. It does not answer, however, for one that is to be bright and cheerful quickly; the tiny occasional sprinkle is the method for that. But in any case, if dust is to be burnt to advantage, it must be burnt with the coal, and used from the time the coal is brought in, to the time that it is done. By this means only can waste of small-coal be avoided.

The sort of range used has a great deal to do with economy of coal. Some ranges are specially constructed for the purpose of economising fuel. A description of these has been given in another part of this work. Nor must it be forgotten that there are artificial aids to economy in the shape of fire-bricks, fire-clay balls, and other contrivances; while some housekeepers have a sheet of iron cut to fit the bottom of the grate, to make fuel burn slowly. Yet even when all these means are adopted, it is still necessary to be careful about the way coal is burnt, if waste in this direction is to be prevented.

Continual poking of the fire is a great cause of waste. A good many English people have a mania for poking the fire. They take up the poker when

they are in a reflective mood, or in an argumentative mood, or in any sort of mood to which humanity is liable, because they find that smashing the large-coal which has ceased to blaze, is an operation soothing to the nerves, and good for getting rid of superfluous energy. In some houses everyone pokes the fire every time the idea comes into his head, and the consequence is that it is never left alone. The plan is not a success, for the hearth is never tidy, the coal-scuttle is constantly needing to be refilled, and the chimney needs to be swept much oftener than would otherwise be the case. What an upset it makes in a house to have the sitting-room chimneys swept in the middle of winter! There is many a chimney that would remain clear from soot twice as long as it does, if it were made a rule that one responsible individual only should be allowed to poke the fire! To a housekeeper with a respect for economy, it is a most trying experience to see first one person and then another breaking the coal and poking the fire. Good-sized pieces of coal of a good sort, which have been on the fire for some time, till hot through, should be broken up only under exceptional circumstances. If left, they will last for hours; and if intelligently guarded and taken care of, will be a source of heat the whole time; while if smashed and spread abroad, they will be gone in half an hour, leaving only a glowing mass of cinders behind.

For general use, moderate-sized pieces of coal make the best fire; but these should not be thrown on from the scuttle. They should be placed on gently, one by one, by means of a curate; or, if too small for this, they should be put on a few at a time with a scoop. If this be done, and if the poker be left unused during the whole day, so that the fire is never violently disturbed and broken up, but only quietly added to from time to time, there will be very little dust, and no waste. A further advantage will be that an even temperature will be maintained. People who burn coal extravagantly, usually live under most unhealthy conditions. They throw on a large quantity of coal, this burns up, and the room gets very hot and close. In a little while the flames subside, the fire is one mass of glowing cinder, and the room is hotter than ever. Then it occurs to some one to mend the fire, and a large quantity of coal is thrown on. At once the room becomes cool, if not chilly. The heat in the hot cinders expends itself in setting fire to the new coal; and till this is accomplished the temperature of the room is lowered. Thus it follows that there are no houses where one is so likely to take cold from being subjected to variations of temperature, as in houses where coal is extravagantly used. To keep the temperature even, coal ought to be put on regularly, gently, and in

small quantities at a time. Thus doctors recommend that in rooms occupied by invalids, the nurse should get the fire to the right degree of heat, then lay a little piece of coal on every quarter of an hour, without disturbing or poking it at all; there will be scarcely any dust, and the temperature will remain the same. It might be watched by means of a thermometer, and would scarcely be found to vary at all. But if the fire were allowed to go down, and then mended liberally, the mercury would rise and fall in most marvellous fashion.

The ideas of householders with regard to the care of coal vary very much with the locality. In the south, where coal is dear, it is respected. Consumers are anxious not to waste it; they are glad to adopt means to make it go far; they compare notes with each other as to the amount which is burnt; and they look upon the individual who can make a little coal go a long way as a good manager. In districts where coal is cheap, however, there is little care of this kind. Coal costs little, and so it is used lavishly. Coal is thrown recklessly on fires which do not need attention; cinders are rarely sifted, but are thrown wholesale into the dust-bin; and individuals who try to check undue consumption are called mean and niggardly. Yet still it is open to question whether these so-called niggardly ones have not the best of it. What do the people who burn coal extravagantly get out of their huge fires? They get a great deal of soot, a great deal of smoke, a great deal of dirt, and a temperature that is trying even to the hardiest. Moreover, without intending it, they commit an offence against morality and patriotism. Apart from the question of household expense altogether, it is our duty to economise with coal. England owes much of its wealth and power to the possession of its valuable coal-fields; and enormous as the supply is known to be, the drain upon it is so excessive that political economists have already calculated the period of its exhaustion, and guesses have been made as to what will become of England when the coal is all burnt. Surely it is wrong to waste what is so valuable. Another consideration which should make us careful of coal, is that it costs so much to procure it. Every year hundreds of deaths occur through accidents in coal-mines; and men have to go down into dark and gloomy caverns, and work in the bowels of the earth, in order to bring up the fuel which we burn so thoughtlessly. If we all realised the danger which these people have to face to obtain coal, we could not reconcile it with our consciences to waste the precious article.

Gas.—The contents of the dust-bin having been satisfactorily disposed of, the next detail requiring the attention of the mistress who wishes to prevent

unnecessary expense, is the consumption of gas. It is marvellous how gas-bills gradually increase in amount from year to year in households where no check is kept on consumption; and the strictest supervision is necessary if gas is not to be wasted. A very effectual way of preventing waste is to turn the gas-meter off during the day, so that small escapes may be prevented in places where the pipes are defective. The condition of the burners, also, has much to do with the amount of the gas-bill. Old worn-out burners lead to waste; and flaring burners are a great extravagance; for with gas, a flare shows that more gas is being given out than is being consumed. A smell of gas should never be disregarded. When it occurs, the householder may know that there is an escape somewhere; and steps should immediately be taken to discover where it is, and to put a stop to it. Last, but not least, gas that is not in use should always be turned very low. A careless person who leaves the gas full on in an unused room, is throwing money away as surely as if he cast it into the gutter.

The best and most economical methods of burning gas have been detailed in another article.

Selling Refuse.—The custom of allowing servants to sell kitchen refuse of any kind, or to have any dealings whatever with persons who go about from house to house purchasing superfluous odds and ends, leads to incalculable leakage. The custom is a temptation to dishonesty, and rewards extravagance. Mistresses who permit it, probably never know how much they lose by it.

Improper Use of Things.—A very usual cause of unnecessary wear and tear, which leads to serious leakage in household expenditure, is the habit of using things improperly and wrongly. This is always the sign of an inferior worker. People who use silver or plated spoons for cooking purposes; who cut up meat with the carving-knife, while the cook's knife is left to rust in the kitchen drawer; who wipe dishes with a dinner-napkin or kitchen table-cloth; who dust a room with a dirty duster or a d'oyley; who sweep the carpet with a hearth-brush, or the hearth with a carpet-brush; who take dainty china cups to ladle soup or hot water; who use table-cloths for dust-sheets, or dispense with a dust-sheet altogether; who leave soap or brushes in water after use; who wash paint with strong hot soda-water; who light the gas with a candle; who sweep the hearth without spreading a hearth-cloth in front of it; who make handsome chairs take the place of step-ladders; who stand on cane-bottomed chairs, and so break holes through them; who strike matches thoughtlessly and unnecessarily; who throw into

the dirty-clothes basket towels or clothes that are damp, and leave them to become mildewed; who make beds when wearing a dirty apron; who leave condiments and sauces uncorked, so that the aroma escapes; who in dry weather leave tubs without a little water in them; who place a lighted candle in a draught, so that it gutters away; who, when about to iron, allow flat-irons to get red-hot, so that they lose their smoothness for evermore; who neglect to change their boots after a dirty walk, and so soil the carpet in room or on stairs; who throw away little drops of beer or milk; who put ivory-handled knives into hot water, and so loosen the handles; who put glass into hot water, so that it cracks; who let silver lie in a heap and become scratched; who leave books wide open, face downwards, on the table; who in winter put large slices of butter in the oven to melt till it is oil, and in summer leave it in the sun;—all these people throw money away through carelessness and heedlessness. The list of improprieties of the sort described might be extended almost indefinitely, but *they all cost money*. They cause expenses to mount to an unmanageable sum, they add to the worry of the housekeeper, and they make economy almost an impossibility. These are some of the leakages in the household purse through which the hardly-earned money of the harassed householder slips away; and if income is to cover expenditure, these are some of the ways which must be either mended or ended.

Care of Bills.—Thrifty managers usually avoid bills. They have a great notion of paying ready money for their purchases; they dread credit, and buy no more than they can pay for at the moment. Yet with all their care it is not likely that they will escape bills entirely; some accounts must stand over; and when one of these is settled, it will be accompanied by a receipted bill. These bills should be most carefully filed; and they should be arranged in order, so that they can be readily put in evidence. It is especially necessary that householders who are accustomed to pay ready money should be particularly careful of the bills which come to them; because the habit of paying at once for purchases gives a feeling of security, and makes the buyer feel that goods once obtained are a possession, and need not cause further trouble. Every month filed household bills should be set in order. They should be folded lengthwise; the name of the tradesman concerned, and the exact date of the payment, should be written clearly on the outside fold; and they should be arranged according to date. At the end of every year these filed bills should be placed together in the order of the months, and put in the drawer or desk set apart for them. If this plan be

adopted regularly, any bill that is wanted can be brought out in a minute or two; and there will be no fear that a bill will be paid twice. To make a payment, and have it forgotten; to be unable to prove it, and consequently be compelled to pay it again, is a most unsatisfactory way of letting money slip through the fingers.

Repairs.—Last, but not least, the neglect to supply small repairs in a household is a fruitful cause of loss. When money is scarce, there is great temptation to let little things go, and to fall below the standard of use and need; yet we never know where neglect of this kind may lead us. Dr. Samuel Smiles, in his work on Thrift, says that if a man once adopts the maxim "It will do," he is given over to the enemy; is on the side of incompetency and defeat; and must be given up as a hopeless subject. He adds, "Neglect of little things has ruined many fortunes, and marred the best of enterprises. The ship which bore home the merchant's treasure was lost because it was allowed to leave the port from which it sailed with a very little hole in the bottom. For want of a nail, the shoe of the aide-de-camp's horse was lost; for want of the shoe, the horse was lost; for want of the horse, the aide-de-camp himself was lost, for the enemy took him, and killed him; and for want of the aide-de-camp's intelligence, the army of his general was lost; and all because a little nail had not been fixed in a horse's shoe."

M. Say, the French political economist, has related the following illustration of the danger of neglect of little things:—Once, at a farm in the country, there was a gate enclosing the cattle and poultry, which was constantly swinging open for want of a proper latch. The expenditure of a penny or two, and a few minutes' time, would have made all right. The gate was on the swing every time a person went out; and not being in a state to shut readily, many of the poultry were from time to time lost. One day a fine young perker made his escape, and the whole family, with the gardener, cook, and milkmaid, turned out in quest of the fugitive. The gardener was the first to discover the pig; and in leaping a ditch to cut off his escape, got a sprain that kept him to his bed for a fortnight. The cook, on her return to the farmhouse, found the linen that she had hung before the fire to dry, burnt; and the milkmaid having forgotten in her haste to tie up the cattle in the cow-house, one of the loose cows had broken the leg of a colt that happened to be kept in the same shed. The linen burnt and the gardener's work lost were worth fully five pounds, and the colt was worth nearly double that money; so that here was a loss in a few minutes of a large sum, purely for

want of a little latch that might have been supplied for a few halfpence.

This illustration may seem absurd, but it is not at all unlikely. Indeed, the seriousness of neglect of this kind depends on the fact that the penalty which has to be paid is usually out of all proportion to its cause. Yet all leakages in the household purse appear, for the most part, trifling. The householder who would succeed in managing the income can on no account afford to disregard small things.

As pounds are made up of pennies, so fortunes are made up of small sums. By stopping small leakages sums are saved which, looked at separately, seem very insignificant; yet if they were counted up and put together at the end of a year, they would amount to a sum which would have been most acceptable if it had been saved. For the majority of people it is much easier to earn money than it is to save it; but "he that despiseth little things shall perish by little and little."

THE CONTENTS OF A MEDICINE-CHEST.

It is useful to have some knowledge, however slight, of the action and properties of a few simple remedies. There are times when the services of a doctor cannot be instantly obtained, although prompt action may be of the utmost importance. For example, it might happen that in some out-of-the-way country district a person would be seized with bleeding from the lungs; such a patient would probably die long before a doctor could be fetched from the nearest village; but if someone had knowledge and sense sufficient to give him a dose of gallic acid, or some other astringent, his life might be saved. In travelling on the Continent, nothing is more common than a sharp attack of diarrhoea, which if neglected may lead to serious consequences. A dose or two of quinine may ward off an ague, whilst a few tabloids of aconite may prevent a chill or cold from developing into bronchitis or inflammation of the lungs. For many reasons, therefore, it is a good plan to have a medicine-chest in the house; for even when there is a doctor handy, it does not always follow that he has the proper drug with him, and time is often of importance. There is no necessity for having a large supply of medicines—a few "simples" just for use in case of emergency are all that is wanted.

In the following list a short account is given of the action of some of the remedies in most frequent use. In the few instances in which active drugs, such as arsenic and aconite, are mentioned, or referred to hereafter in the treatment of disease, it will be noticed that the dose is so small as to be almost homœopathic; and when possible, the drugs are recommended to be taken in the form of tabloids. There are many advantages in this, the chief being that there is no trouble in weighing or measuring, and the possibility of an over-dose is reduced to a minimum. These tabloids can be procured of any chemist, and as they contain nothing but the pure drug they do not readily deteriorate.

Aconite is obtained from *Aconitum napellus*, the Monkshood or Wolfsbane, which is found in every cottager's garden and is also imported in large quantities from Germany and Switzerland. Both the root and the leaves are employed in making the different preparations. They contain a very active and poisonous alkaloid known as Aconitia, which is found in all parts of the plant. For external application there is a liniment of aconite, which, when rubbed over a tender part, produces numbness and insensibility, and is largely employed in neuralgia and other painful affections. It must be used cautiously, and it is often diluted with liniment of chloroform to aid its absorption. For internal administration the tincture of aconite is commonly given. In the British Pharmacopœia it is stated that the dose is from five to fifteen minims or drops, but this is a very large dose and might readily produce dangerous symptoms. A better and safer plan is to give it in very small doses frequently repeated. Thirty drops should be added to a tumblerful of cold water, and of this a teaspoonful should be taken every ten minutes for an hour, and subsequently hourly for six hours; or, better still, a tabloid of tincture of aconite containing one minim in each may be taken with the same frequency. These small doses of aconite will accomplish just as much as the larger doses without the attendant danger. In the case of children a proportionately smaller quantity would be given. Aconite reduces the temperature when raised, and will be found useful in the early stages of all fevers and particularly of all colds. It is especially indicated in cases of quinsy, for it not only eases the pain, but brings down the temperature, lowers the pulse, and makes the skin moist. It is one of our most useful remedies in all acute diseases.

Actæa Racemosa.—This is the Cimicifuga, or Black Snake Root, an American remedy. The tincture is the preparation commonly employed, and the dose

is from five to fifteen minims in a little water four times a day. It is useful in many affections of the womb, and is largely employed for checking the periods when too frequent or too profuse. It has been used with advantage in many forms of rheumatism, and often succeeds after the failure of other remedies.

Aloes.—There are two kinds of aloes, the Barbadoes and the Socotrine, but they have the same action. The extract of aloes is a common constituent of the "dinner pill" which many people take before dining out. The usual formula is—"Extract of Barbadoes Aloes, two grains; extract of Nux Vomica, half a grain; Extract of Gentian, a grain and a half. One or two to be taken half an hour before meals." The old-fashioned "baume de vie" or balm of life, which is simply the compound decoction of aloes, is still a favourite. It is a laxative, and the dose is a table-spoonful.

Alum is useful as an astringent, and is invaluable for checking bleeding from piles, leech-bites, or small cuts. Bleeding from the gums may be stopped by dissolving a teaspoonful of alum in a tumbler of water and holding the solution in the mouth until the desired effect is produced. An alum gargle containing two and a half ounces of alum, and an ounce of honey, to a pint of rose-water, may be used for relaxed sore throat. In whooping cough unattended with bronchitis, three or four grains of alum dissolved in a little sugar and water will often effect a cure. The ordinary dose of alum is, for an adult, from ten to twenty grains. Dried alum is used only as a local application.

Antipyrin has been largely used of late, not only to reduce fever, but as a remedy for neuralgia, migraine, and a number of painful affections. It is beneficial in sea-sickness, and is now acknowledged to be one of our most valuable remedies. It has been accused of producing a rash on the skin and other disagreeable symptoms, but the evidence on this point is, to say the least, inconclusive. It is given in the form of tabloids, each containing five grains. One or two may be taken as a dose, and should be repeated every six hours for a couple of days.

Apomorphine is a derivative of Morphine. It is a very powerful emetic, and is usually injected under the skin in cases of poisoning. In small doses, it is an excellent remedy for bronchitis and other affections of the chest, but it is too active for employment as a domestic remedy.

Arnica is derived from the *Arnica montana*, a plant found abundantly in many parts of Europe.

It is used almost exclusively as an application for bruises and swellings. The arnica liniment is the favourite application, but the tincture is sometimes taken internally for the same purpose. It has somewhat fallen out of use of late years, for in many constitutions it gives rise to symptoms of erysipelas. Hazeline, which has much the same action, is safer, and has to some extent superseded it. A very good arnica lotion may be made by adding twenty drops of tincture of arnica to half an ounce of water. It should be applied on lint or soft rag.

Arsenic is a powerful poison, but in small medicinal doses is a most wonderful curative agent, and is employed in a great number of cases, and in various diseases, ranging from ague to consumption. The dose of arsenious acid is a fiftieth of a grain, and it is taken in the form of tabloids, one three times a day after meals.

Artificial Digestion.—Food may be digested artificially by mixing with it Zymine, which is an extract of pancreas or sweetbread. In this way predigested milk, beef-tea, and various articles of sick dietary may be prepared. The zymine powders can be obtained from any chemist, and very little practice will suffice to enable anyone to prepare a large number of dishes which are already digested, and will be assimilated without the slightest difficulty by even the most delicate invalid. Both the Kepler Extract of Malt, and Pepsin, are powerful aids to digestion.

Atropine or Atropia is the active principle of Belladonna. It is largely employed to dilate the pupil in affections of the eye, and is also useful given internally to check the excessive perspirations which are common in consumption and other wasting diseases. The dose is very small, not more than a hundredth of a grain, and it should be taken only under medical advice.

Bark.—By "bark" is meant Cinchona Bark, obtained from trees growing on the slopes of the Andes, or cultivated artificially in India and Ceylon. It is the plant from which chiefly we obtain quinine. It was a great favourite in former times, but its popularity seems to be somewhat on the wane. At one time "bark and port wine" was the remedy for nearly all wasting and debilitating diseases. The decoction of cinchona, the dose of which is two table-spoonfuls in water, three times a day, is the favourite preparation. It is not only a good tonic, improving the appetite and digestive powers, but is also a cure for ague, malarial fevers, and most forms of neuralgia. Quinine represents its active properties and is much more palatable.

Beef and Iron Wine is an excellent preparation, and is a great favourite with children. It contains a small portion of quinine, which serves to improve the appetite. Its full name is "Burroughs' Beef and Iron Wine." It may be taken alone, but most people prefer it with a little water. A table-spoonful at eleven and four will be found excellent for growing children, and its use should be continued for at least two months.

Belladonna.—This is the *Atropa belladonna*, the "Dwale," or Deadly Nightshade, which grows wild in many parts of England. The preparation commonly employed for external application is the liniment, whilst the tincture is given internally. Belladonna applied locally relieves pain in the muscles and over-sensitiveness of the skin. It is also useful in checking the formation of milk abscesses. Given internally, it arrests sweating, especially the sweating of consumptive patients. For checking excessive perspiration of the hands or feet, the liniment may be mixed with an equal quantity of Eau-de-Cologne, and rubbed in night and morning. A belladonna plaster applied to the side is useful in checking cough and allaying pain. The skin should be previously well washed with soap and water, so as to remove any fatty or greasy matter and prevent itching. The ordinary dose is ten drops of the tincture, but it is safer to give it in the form of the tabloids, one being taken every hour until relief is obtained. Small doses of belladonna are often useful in constipation, and the tabloids may be given alternately with the tabloids of aconite in the early stages of scarlet fever, measles, and other febrile diseases.

Bismuth.—Bismuth is a sedative to the stomach, and is useful in various forms of dyspepsia and sickness. It is one of the best remedies for checking vomiting, especially the vomiting of pregnancy. It is insoluble in water, and should be taken in the form of the five-grain tabloids, two or three being the usual dose. It is essential that it should be given before meals, as when administered after food it does not come in contact with the walls of the stomach, and fails to accomplish its object. It is useful in chronic diarrhoea, especially in children. It is not poisonous, and is a very safe remedy. The carbonate of bismuth ground up in a fine powder is useful as a cosmetic, and is less injurious to the skin than preparations containing lead.

Black Draught is an old-fashioned purgative mixture, very nasty, but very effectual. It contains Epsom salts, infusion of senna, tincture of senna, compound tincture of cardamoms, and extract of

liquorice. The dose varies somewhat with the requirements of the patient, but may be from one to four table-spoonfuls. There are many other purgatives which are equally efficacious and are much more agreeable to take. It is now rarely prescribed except in remote country districts, or in workhouse infirmaries.

Blaud's Pill.—This is a pill containing iron and largely sold by chemists as a general tonic. It is composed of equal parts of sulphate of iron and carbonate of potassium. It is sometimes useful, but is a much-overrated preparation.

Blisters.—There are many ways of raising a blister. Painting the part with blistering fluid, or the application of a cantharides plaster, will always produce the desired effect. A few drops of chloroform poured on a piece of lint and confined under a watch-glass is a still better plan. A great mystery is often made about "dressing" blisters, but, as a rule, they require no dressing at all. It is better not to cut them, but simply to cover them with a pad of cotton wool, which may be retained in position by a bandage.

Blue Pill.—This is a mercurial pill largely employed as a purgative, and for its action on the liver. A five-grain pill is usually taken at bed-time, and is followed by a draught in the morning. It is not a very safe preparation for continuous use.

Borax is a native of Thibet, and is imported from India. It is a most excellent remedy for all affections of the throat. A good gargle may be made by mixing one drachm of borax and two drachms of honey with four ounces of water. Voice tabloids contain borax, chlorate of potash, and cocaine, and are used to prevent tickling in the throat, and to clear the voice before speaking in public. Borax is wonderfully efficacious in removing scurf or dandruff from the head, and may be conveniently used in the form of glycerine of borax diluted with a little rose-water or elder-flower-water. Borax is a good application for the mouth and gums, and, mixed with tincture of myrrh, is largely employed as a tooth-wash.

Bromide of Potassium.—There are three bromides used in medicine—the bromide of potassium, the bromide of sodium, and the bromide of ammonium. They are all nerve sedatives, and exert a soothing or calming influence on the brain. Taken at bed-time they induce sleep. They are useful in convulsive disorders, such as epilepsy, whooping-cough, and allied affections. They are

very useful in the troubles from which women periodically suffer. It is probable that all three bromides have, in the main, the same action; but, as a rule, the bromide of sodium is to be preferred, as it exerts a less depressing action on the heart than the potassium compound. All three bromides can be obtained in five-grain tabloids, the dose being three, three times a day. On the Continent it is customary to give a mixture of all the bromides. It is not by any means a bad plan, and in epilepsy one tabloid of each of the bromides may be given three times a day after meals, with an extra dose at bed-time if necessary.

Bryony is obtained from the Common Bryony, *Bryonia dioica*, a native plant found growing in most of our hedges. The tincture is the preparation employed for medicinal use, and it will be found of much value in the treatment of colds, and especially in pleurisy. From two to three drops should be taken every two or three hours on sugar or in a little water.

Caffeine, an active principle contained in coffee and tea, is a valuable remedy, and is largely esteemed in the treatment of headaches and some forms of neuralgia. It relieves nausea, and is found to be efficacious in sea-sickness. It acts on the kidneys, and is given with success in the treatment of dropsy. Bishop's Effervescent Citrate of Caffeine contains a grain in the teaspoonful, and is an excellent preparation. For sick headache a couple of teaspoonfuls in a tumbler of water will usually give prompt relief. In cases of dropsy the tabloids are to be preferred. They contain one grain in each, and three or more should be taken in water three or four times a day.

Calomel.—This is chemically the subchloride of mercury. It is a heavy, yellowish-white powder, not soluble in water. It is a powerful purgative, and has the reputation of stimulating the action of the liver. The usual dose is three grains, but some people exceptionally take as much as ten grains for a single dose. A good formula for a calomel pill to be taken as a purgative is the following:—"Calomel, three grains; extract of henbane, a sufficient quantity to make a pill. To be coated, and taken at bed-time." The object of the henbane is to prevent griping. In small doses calomel is useful in checking the diarrhoea of children, and the following prescription may be used for this purpose:—"Calomel, two grains; sugar of milk, one drachm. Mix, triturate finely, and divide into twelve powders. One to be taken every three or four hours." The tabloid triturates of calomel containing one-tenth of a grain

will be found useful in checking many forms of diarrhoea.

Camphor.—The essence of camphor is a saturated solution of camphor in spirit, and is usually employed in the treatment of summer and autumnal diarrhoea. It is the best remedy for what is sometimes called "English cholera." Two drops should be given on a piece of sugar every ten minutes for an hour, the patient meanwhile taking at intervals a little cold milk mixed with brandy. Essence of camphor is useful in the initial stage of many febrile complaints, and is highly recommended in attacks of catarrh, or cold in the head. It is certainly a remedy to have in the house for use in case of emergency, but it should not be taken in unlimited quantities, for in large doses it is a poison.

Capsicum is made from chilies or red pepper, and is a very valuable remedy. It is best given in the form of the tabloid triturates, each containing a dose equal to one drop of the tincture. These tabloids will be found wonderfully useful in the treatment of flatulent colic, dyspepsia, and generally as a "pick-me-up." They are by far the best remedy for the cure of alcoholism. One or two tabloids in a small cup of beef-tea at eleven o'clock in the morning will ward off the desire for stimulants for some hours. Beef-tea is now obtainable at most restaurant bars, and a small bottle of capsicum tabloids can be carried in the pocket without difficulty.

Carbonate of Ammonia.—This is one of the chief constituents of Sal Volatile. When administered in that form it acts as a stimulant, but given alone it is an expectorant, and is useful in bronchitis. It may be obtained in five-grain tabloids, and one should be taken three times a day till the bronchitis is relieved.

Cascara Sagrada is an excellent remedy for habitual constipation, and is probably the best drug at our command for the treatment of this distressing condition. Whether it should be taken over-night or in the morning will depend very much on the requirements of the patient. The tabloids of extract of cascara sagrada contain two grains, whilst the compound tabloids are composed of one grain of the dry extract, half a grain of euonymine, one-sixteenth of a grain of extract of nux vomica, and one-third of a grain of extract of hyoscyamus. Squire's Elixir of Cascara is an admirable preparation.

Castor Oil is expressed from the seeds of the castor oil plant, which is found native in almost all

parts of the East and West Indies, and is frequently cultivated for ornamental purposes in this country. Castor oil is the popular remedy for constipation, but it cannot be said that it is very nice, or that its taste is easily disguised. The dose for infants is a small teaspoonful; for young children, from one to two fluid drachms; and for adults, from one to three table-spoonfuls. It may be given in milk, or in orange wine, or in beef-tea highly peppered and salted. The great objection to its use as a remedy for constipation, is that it ultimately increases the torpidity of the bowels.

Charcoal Biscuits are used chiefly in the treatment of flatulence and other forms of dyspepsia. It is probable that most of the biscuits sold do not contain powdered wood charcoal, but are simply ordinary biscuits baked till they are nearly black. Charcoal is perfectly harmless, and may be taken with meals without fear of bad consequences.

Chemical Food.—Parrish's Chemical Food has been a popular favourite for the last twenty years. It contains phosphate of iron, phosphate of lime, phosphate of soda, and phosphate of potash. The dose is from one to two drachms in a little water three times a day. It is manufactured according to the original formula by Messrs. Squire and Sons, of London. There are many cheap imitations, but it is well to get the best.

Chloral is a very popular remedy for inducing sleep, but it cannot be said that it is a very safe one. Many ladies take it in considerable quantities, and become "chloral tipplers." The craving for it becomes uncontrollable, and the dose is gradually increased until dangerous symptoms ensue. [See POISONING.] Death from chloral poisoning is very common, and there is a growing opinion that some restriction should be placed on the sale of the drug. The syrup of chloral contains ten grains to the drachm, the dose being a teaspoonful in water. Chloral is useful not only in sleeplessness, but in delirium tremens, asthma, whooping-cough, and a number of spasmodic affections. It is sometimes employed to allay the cough of consumption, and to relieve the pain of cancer. It is a most useful remedy, but it is dangerous in unskilled hands.

Chlorate of Potash is useful in nearly all affections of the throat and tonsils. The chlorate of potash lozenges of the Pharmacopœia, made with sugar, gum acacia, and mucilage, are hard and unpalatable, and have been almost superseded by the tabloids of chlorate of potash, which dissolve readily in the mouth, and act as a kind of continuous gargle.

These tabloids are useful in quinsy, in chronic tonsillitis, sore throat, whether acute or chronic, and in ulceration of the mouth. They must be sucked slowly and almost constantly. When hoarseness is the prevailing symptom, tabloids of chlorate of potash and borax will be found even more useful.

Chloride of Ammonium.—This drug, commonly known as Sal Ammoniac, is a useful expectorant, and an admirable remedy for neuralgia. In chronic bronchitis it is given in ten-grain doses every four hours; but in neuralgia thirty grains should be given three times a day. It is soluble in water, but the solution is extremely nasty. Almost the only thing which will disguise its taste is the liquid extract of liquorice, a teaspoonful of which should be added to every ounce of the mixture. The vapour of chloride of ammonium generated by the action of hydrochloric acid on ammonia may, after being washed, be inhaled into the lungs, and is useful in the treatment of most affections of the throat and chest. It is essential that the vapour should be absolutely neutral, that it should be produced freely, that it should not vary in quality, and the apparatus should be always ready for use, and should be kept easily in order. The Vereker Patent Chloride of Ammonium Inhaler can be obtained from any chemist, and will be found thoroughly reliable. It should be used for ten minutes at a time three or four times a day. It is quite easy to add pure terebene, pinol, or any other antiseptic to the water in the wash-bottle simply by dropping the required quantity on a piece of absorbent cotton-wool.

Chlorodyne is one of the best known of the patent medicines. It is said to contain chloroform, muriate of morphia, ether, peppermint, prussic acid, and treacle. It is largely used in the treatment of coughs or colds, and as a remedy for colic, diarrhoea, and similar affections. It has this great advantage: that the dose is small, and that it can always be obtained on the Continent, often when other remedies are not procurable.

Coca, obtained from the leaves of *Erythroxylon coca*, a native of South America, is largely used to promote mental activity and the capacity for work. It improves digestion in dyspeptic conditions, and is a nerve and muscle tonic. It is not poisonous, and is not known to produce any injurious effect. Some people chew the dried leaves, but, as a rule, the coca wine is preferred. There are many kinds of coca wine, more or less costly; but it is readily prepared at home. The leaves are cheap enough, and half a pound will yield a very fair supply—enough,

probably, to last for some weeks. The leaves should be laid at the bottom of a glass jug, and the wine should be poured over them. They may be allowed to steep for a week or more. It matters little what wine is employed, but Madeira or Marsala will be found to answer as well as anything. The exact quantity of the ingredients employed is not a matter of any great importance.

Cocaine is an alkaloid or active principle obtained from coca. It is what is called a "local anæsthetic"—that is to say, when a solution of it is dropped into the eye, or applied with a brush to the throat or tongue, it produces insensibility to pain; so that even severe operations may be performed without inconvenience to the patient, and without loss of consciousness. Tabloids of cocaine introduced into the nostrils constitute one of the best remedies for hay-fever. They are also useful in sea-sickness.

Cod-Liver Oil is used in the treatment of nearly all wasting diseases. There are many kinds of cod-liver oil, but the "pale" is the best. The "light brown" is impure, and is, as a rule, not easily assimilated. Some people like cod-liver oil, whilst others have a great disgust for it. It may be taken in various ways: in milk, beef-tea, orange wine, or floating on a tonic mixture. It must not be given before meals, or it will impair the appetite. The best time to take it is immediately after a meal, but patients sometimes prefer it at bed-time. The dose is from a teaspoonful to a table-spoonful, and it is useless to give more. It is taken more readily in the winter than the summer. It is often given in combination with extract of malt, the Kepler Extract of Malt and cod-liver oil being an excellent preparation. It is useful not only in consumption, but in rickets, general debility, chronic bronchitis, and a variety of ailments.

Colocynth is an excellent purgative, and is usually given in the form of the compound colocynth pill, one or two pills being taken at bed-time, and followed by a saline draught in the morning.

Digitalis or Foxglove is one of the chief remedies for palpitation and the various forms of heart-disease. It is administered in the form of the infusion or tincture, but it is an active poison, and should be employed only under medical advice. It acts on the kidneys, and is useful in many kinds of dropsy.

Dover's Powder is a combination of opium, ipecacuanha, and sulphate of potassium. Ten grains

at bed-time is an excellent remedy for a cold or an incipient attack of bronchitis. It is also useful in colic and in diarrhoea. It may be obtained in tabloids, each containing five grains.

Effervescing Preparations.—Many drugs are conveniently given in an effervescing form, and Bishop's effervescing preparations are well known. The following is a list of useful combinations:—

Antipyrin.—5 grains to the drachm.

Bismuth, Iron, and Quinine.—Bismuth 4 grains, iron 4 grains, quinine 1 grain to the drachm.

Bismuth, Iron, and Strychnine.—Bismuth 4 grains, iron 4 grains, strychnine $\frac{1}{30}$ grain to the drachm.

Bismuth and Iron.—Bismuth 4 grains, iron 4 grains to the drachm.

Bismuth and Pepsin.—Bismuth 4 grains, pepsin 4 grains to the drachm.

Bismuth, Pepsin, and Strychnine.—Bismuth 4 grains, pepsin 4 grains, strychnine $\frac{1}{30}$ grain to the drachm.

Bismuth, Pepsin, and Steel.—Bismuth 4 grains, pepsin 4 grains, steel 4 grains to the drachm.

Bismuth, Pepsin, and Quinine.—Bismuth 4 grains, pepsin 4 grains, quinine 1 grain to the drachm.

Caffeine Citrate.—1 grain to the drachm.

Caffeine Hydrobromate.—1 grain to the drachm.

Extract Nux Vomica.— $\frac{1}{3}$ grain to the drachm.

Iron, Quinine, and Strychnine.—Iron 4 grains, quinine 1 grain, strychnine $\frac{1}{30}$ grain to the drachm.

Iron and Arsenic.—Iron 4 grains, Fowler's solution 3 minims to the drachm.

Iron, Quinine, and Pepsin.—Iron 4 grains, quinine 1 grain, pepsin 4 grains to the drachm.

Iron and Pepsin.—Iron 4 grains, pepsin 4 grains to the drachm.

The dose of each is a teaspoonful taken while effervescing in a glass of water.

Epsom Salts.—This is a good old-fashioned purgative, which enters into the composition of black draught and various other preparations. It is one of the chief constituents of Pullna and Friedrichshall waters, and is also found in Carlsbad salts. It is not very agreeable to take, but it is efficacious. The dose is from a teaspoonful to an ounce, dissolved in water and taken fasting.

Extract of Malt is a powerful digestive agent, and improves the general nutrition of the body. Although prepared from barley, it has not undergone fermentation, and is quite free from alcohol. It is a thick substance, looking somewhat like treacle; but it should be quite light in colour. The Kepler Extract of Malt is made entirely from barley, which contains more diastase than wheat, oats, or Indian corn. It may be used advantageously to sweeten coffee, hominy, rice, corn-flour, and gruel. Mixed with Seltzer water, it forms a palatable beverage for invalids. Children generally take it best in milk or spread on bread and butter. The

dose is from one to two teaspoonfuls, and it should be taken immediately after meals. The Kepler Extract is useful in all cases in which cod-liver oil is usually prescribed. It is one of the best remedies for rickets, and is largely used in consumption, chronic bronchitis, and many other affections. It has the peculiar property of converting starch into sugar, so that it plays an important part in the domestic economy.

There are various combinations of Kepler's Extract of Malt, of which the following are the most popular:—

Extract of malt, with beef and iron, for anæmia and general debility.	
" " " casearia sagrada, for constipation.	
" " " cod-liver oil, for consumption, rickets, and other wasting diseases.	
" " " cod-liver oil and hypophosphites, for consumption.	
" " " chocolate, for growing children.	
" " " iodide of iron, for scrofulous children.	
" " " iron, quinine, and strychnine, for patients needing a tonic.	
" " " hops, for dyspepsia and flatulence.	
" " " hypophosphites, for mental strain and over-work.	
" " " pancreatin, for inability to digest fatty food.	
" " " pepsin, for pain after meals, and distension.	
" " " phosphates, for suckling women.	

Friar's Balsam, known in the Pharmacopœia as Compound Tincture of Benzoin, is a good local application for cuts and wounds of all kinds; whilst, taken internally, it is a useful remedy for coughs and colds. Externally, for wounds, it may be dropped on lint or a piece of old rag; whilst the dose internally is from half a teaspoonful to a teaspoonful on sugar or in milk. It is a very old favourite, and is a thoroughly reliable preparation.

Fellows' Syrup of the Hypophosphites is a combination of the hypophosphites of lime, iron, quinine, strychnine, potassium, and manganese. The dose is a teaspoonful in a wine-glass of water three times a day, a proportionately smaller quantity being given in the case of children. It is a most useful nervine tonic and "pick-me-up," and is admirably adapted for those who are worried and harassed and over-worked, mentally and physically. It is useful, too, when any chronic discharge has lowered the general tone of the system. It is largely used in consumption, chronic bronchitis, neuralgia, and wasting diseases.

Gentian, obtained from the *Gentiana lutea*, growing on the Alps and in mountainous districts generally, is a good stomachic tonic, and does much

to improve digestion and aid the appetite. There are several preparations, one of the best being the compound tincture, which contains, in addition to the gentian, bitter orange peel and cardamom seeds. The dose is a teaspoonful in water. Another good preparation is the compound infusion, the dose of which is a couple of table spoonfuls or more. Gentian, if given alone, should be taken about a quarter of an hour before meals. It forms the basis of most of our "bitters."

Grey Powder consists simply of mercury and chalk rubbed up together so as to form a triturate. By trituration with an inert substance, such as chalk, the mercury is much more finely divided and its activity is greatly increased. Mercury itself (that is to say, metallic mercury) has practically no medicinal action; but on being finely divided, it is taken up into the circulation and exerts a powerful action. Tabloid triturates of grey powder prepared in this way are very active, and are largely used in the treatment of a number of constitutional diseases. Small doses of grey powder act as a tonic, and promote the nutrition of all the tissues. They constitute the best remedy for rickets, scrofula, infantile diarrhœa, and a host of diseases. This mode of treatment is comparatively new, but is now largely adopted.

Gregory's Powder is a mixture of rhubarb, magnesia, and ginger. It is used as a purgative for children, in doses of from five to ten grains, and is extremely nasty to take. It would be much better to regulate the bowels by the administration of fruit, figs, prunes, whole-meal bread, and other simple remedies.

Hazeline is a clear colourless fluid, an aqueous extract of the fresh bark of *Hamamelis virginica*, an American plant. It is one of the best remedies for piles and for all forms of bleeding. As a local application for bruises, burns, and scalds, it is much to be preferred to arnica. It is not poisonous, and may be taken internally in practically unlimited quantities, although the ordinary dose is a teaspoonful in water. When the bleeding is from the bowels, it is a good plan to inject three or four ounces of the hazeline with an enema apparatus. The following directions are reliable:—For hæmorrhage from the nose, lungs, stomach, bowels, kidneys, or womb, from one to three teaspoonfuls every hour may be taken till it stops, and three times daily for a while after. In nose-bleeding it may be snuffed up the nose.

For cold in the head, ozæna, or ulceration, it may be snuffed up the nostrils with an equal part of tepid water, or inhaled as steam or spray.

In aphthæ, stomatitis, ulcerative and diphtheritic sore throat, tender gums, toothache, and bleeding sockets, the way to employ it is as a gargle, or in steam inhalations.

It may be applied in full strength for bruises, sprains, strains, soreness, lameness, stiffness, and chronic rheumatism.

For the pain of piles, burns, erysipelas, eczema, and for varicose veins, wounds and sores; absorbent cotton may be laid over the part and kept saturated with hazeline. Two table-spoonfuls (diluted with an equal part of tepid water) may be injected into the rectum for internal piles, and a teaspoonful taken by the mouth three times a day.

For diarrhœa, dysentery, and inflammation of the bowels, it may be sprinkled on flannels wrung out of hot water, and applied to the abdomen. Take also thirty drops in water every three hours. For external application in piles, an ointment composed of equal parts of Hazeline and Lanoline is excellent.

Ipecacuanha Wine is commonly used as an expectorant and emetic, although it is a little uncertain in its action. It is given in cases of poisoning because it is always at hand, or can be readily procured, but it is far less reliable than sulphate of zinc or even alum. As an expectorant to bring up the phlegm in colds and cases of bronchitis, ten drops may answer fairly well; but to evacuate the contents of the stomach, it is desirable to give a couple of table-spoonfuls. In chronic bronchitis it may be used as a spray by means of a steam atomiser, and usually answers admirably.

Iron Pills are used as a general tonic, and for the treatment of anæmia and debility. The formula for Bland's pills has already been given. A much more active iron pill is made by rubbing up together five grains of sulphate of iron and a drop or two of simple syrup, nothing else being added. The preparation of these pills requires some skill, and is a good test of the competence of a chemist.

Iodine is largely used as a local application, not only for enlarged joints, but for coughs and colds, and pains in the chest. The liniment of iodine is much stronger than the tincture and should be applied only once or twice. The tincture may be painted on with a large brush, once or twice a day until the skin becomes tender. Both preparations are useful, but the liniment is by far the better.

Jalap is a drug obtained from Mexico, being imported from Xalapa or Jalapa, from which it derives its name. The compound jalap powder is a mixture of powdered jalap, ginger, and acid tart-

rate of potassium. It is an active purgative, and produces copious watery motions. The dose is a scruple or twenty grains, and it is largely employed in cases of dropsy.

Laudanum is tincture of opium, one grain of the crude drug being contained in every fourteen and a half drops. It is a thoroughly reliable preparation, and is largely used in the treatment of diarrhœa and for the relief of pain, the dose for an adult being from twenty to thirty drops. It must be given with caution to children.

Lime-Water is usually prepared as follows:—"Put two ounces of slaked lime into a stoppered bottle containing a gallon of water, shake it for a few minutes, and then put it aside to settle. In a few hours the undissolved lime will have fallen to the bottom, and the upper clear fluid may be decanted off and used as required. It is important to keep the bottle well stoppered." Lime is much more readily soluble in sugar and water than in pure water, and advantage is taken of this fact to make a saccharated solution of lime which is twelve times as strong as the ordinary lime-water. It is prepared as follows:—"Rub up together one ounce of slaked lime and two ounces of white sugar. Transfer the powder to a bottle containing a pint of water, and shake it occasionally for a few hours. Finally, draw off the clear fluid and keep it in a stoppered bottle." Lime-water is useful in vomiting, and in diarrhœa, and is frequently mixed with milk when not retained by young children. The best proportion is one part of lime-water to three of milk. By many doctors lime-water is highly esteemed in the treatment of consumption. The dose of lime-water is from one to two ounces, whilst of the saccharated solution from fifteen drops to a teaspoonful may be taken.

Lanoline is a purified fat obtained from sheep's wool, and is now largely employed in the preparation of ointments. It mixes readily with water and with all medicaments. It is bland and soothing, and is readily absorbed by the skin. It is employed for the introduction of various drugs into the system, and also for its local action on the skin. It forms the basis of many useful preparations, such as Lanoline Pomade, Lanoline Cold Cream, Lanoline Soap, and Lanoline Hazeline Ointment.

Lithia is frequently used in the treatment of gout, being found in chronic cases to be more useful than colchicum. The carbonate of lithia tablets contain two grains in each, and two or three may be taken with every meal. The effervescent lithia water is also useful.

Menthol Cones are very useful as a local application in cases of headache, megrim, and neuralgia, the effect being remarkably prompt. For pains in the back or side a perforated menthol plaster will be found preferable, as its effect is more persistent. Menthol is undoubtedly a very useful remedy.

Mindererus's Spirit is the old-fashioned name for the solution of Acetate of Ammonia. It is a useful remedy and quite harmless. Three teaspoonfuls of the solution with twenty drops of sweet spirits of nitre may be added to a wine-glass of water, and taken every three or four hours to check the onset of a cold. It acts not only on the skin but on the kidneys, and is wonderfully efficacious. Ladies who are temporarily indisposed often take it with much advantage.

Nitre Balls are composed of nitre or saltpetre, and were formerly much used in the treatment of various forms of sore throat. The nitre tabloids have now almost entirely superseded them, and are not only more agreeable to take, but are more efficacious.

Nitro-Glycerine is the recognised remedy for angina pectoris, or suffocative breast-pang, a disease which was formerly regarded as uniformly fatal. The nitro-glycerine checks the paroxysms and prevents their recurrence. It has been the means of saving thousands of valuable lives. Its administration requires great care, and much depends on the proper selection of the dose and the form of administration. Its use will have to be continued for at least two years in order to effect a cure. It is also valuable in the treatment of neuralgia, megrim, and a number of allied complaints. This, however, is a drug which should never be taken except under direct medical administration, unless in mere continuance of the course of treatment originally directed by a qualified practitioner.

Paregoric.—This is the Compound Tincture of Opium of the British Pharmacopœia. It contains opium, benzoic acid, camphor, oil of anise, and spirit. The dose is from fifteen to thirty drops, and it is used in the treatment of coughs and colds of all kinds.

Pepsin, derived from the stomach of the pig, is a powerful digestive agent, and is much used in the treatment of dyspepsia. It is said that one grain of the Fairchild scale pepsin will digest over a thousand grains of white of egg. It should be given in the form of pepsin tabloids, three or four being swallowed with a little water imme-

diately after meals. The relief afforded is often something marvellous. It should be remembered that some forms of pepsin are almost valueless, the name pepsin alone being no guarantee of efficacy.

Peptonised Foods are usually prepared with Zymino Peptonising Powders, zymine being an extract of the pancreas or sweetbread. The following directions are reliable :—

Peptonised Milk.—Add a zymine peptonising powder to one pint of milk, diluted with a quarter of a pint of water. Keep warm twenty minutes, boil, sweeten, and add a little cream.

Peptonised Milk for an Infant.—A quarter of a powder to half a pint of milk, and a quarter of a pint of water.

Peptonised Gruel.—Add a peptonising powder to half a pint of milk and half a pint of gruel, made with water. Keep warm thirty minutes, stirring occasionally.

Peptonised Milk Jelly.—Pour three-quarters of an ounce of gelatine into a pint of water, and when it is swollen, gently warm; add a pint of peptonised milk which has been boiled, a quarter of a pound of crushed sugar, a piece of lemon or orange, three table-spoonfuls of rum, and strain through finest flannel. Put it in a cold place to set.

Peptonised Beef-Tea.—Cook gently half a pound of lean meat (minced) in half a pint of water till it boils. Add half a pint more cold water, half a drachm of zymine, and a scruple of bicarbonate of soda. Keep warm three hours, boil, strain, and season.

Calf's-Foot Jelly.—The addition of calves' feet to the beef-tea gives a very delicate jelly, though isinglass, or any pure gelatine, will answer the purpose.

For nutritive enemata any food can be thoroughly predigested with zymine; it is then readily absorbed by the rectum.

Pinol is the volatile oil distilled from the needles of the *Pinus pumilio*, growing just below the snow-line of the Alps. It has a very pleasant taste and odour, and is one of the best remedies for cold in the head, hay-fever, sore throat, chronic bronchitis, and many affections of the genito-urinary organs. It is useful applied locally in sprains and bruises, and is frequently inhaled with benefit in cases of consumption. The dose for internal administration is from two to five drops, but more may be taken.

Plasters.—There are many different kinds of plaster mentioned in the Pharmacopœia. Thus, the belladonna plaster is used for the relief of pain, the cantharides plaster for its blistering action, the iron and resin plasters for affording relief to overstrained muscles, and the opium plaster as an anodyne. The so-called mustard plaster is in reality a poultice. Plasters should be gently warmed in front of the fire before being applied, except in very hot weather. The skin should be washed with soap and warm water, so as to remove any perspiration or greasy matter, and great care should be taken to put on the plaster without folds or creases in it, or it

will be uncomfortable. Plasters can be "spread" on almost any substance, and can be cut to any required size or shape. Many plasters are perforated with holes about the size of a pin-head arranged at regular intervals, so as to admit of the escape of the perspiration. The plaster may be worn until it becomes loose or uncomfortable.

Pure Terebene is a clear colourless fluid, having an agreeable taste and odour. It is one of the best remedies for flatulence and its attendant evils, and has been employed with very great success in the treatment of bronchial catarrh and chronic bronchitis. The dose is from two to ten drops, or even more, every three or four hours. It will not mix with water or milk, and is best taken on a piece of sugar. A mixture of equal parts of pure terebene and pinol is even better than the pure terebene itself. Pure terebene, if inhaled for some weeks almost continuously, will do much to arrest the morbid change which takes place in the lungs in cases of consumption. It is necessary to ask for *pure* terebene, or a substance intended for disinfecting purposes may be substituted.

Quinine, or Sulphate of Quinine, is one of the active principles obtained from *Cinchona* bark. It is extracted in enormous quantities, and is employed not only as a tonic, but in the treatment of ague, neuralgia, and a variety of diseases, besides reducing the temperature in typhoid and other fevers. When large bodies of men are employed in aguish districts, quinine should be served out to them daily so as to keep off fever. The best way to ensure its being taken is to mix it with rum. In the French navy, arsenic is used as a substitute for quinine, but it is less efficacious, and the mortality from ague is much higher than amongst our own troops. Cinchonine and cinchonidine, which are also extracted from bark, have the same power of warding off fever, but to a smaller degree. The sulphate of quinine is not soluble in water, but the addition of a few drops of dilute sulphuric acid will cause it to dissolve quite readily. Some people prefer taking it in sherry, whilst others regard a cup of green tea as the best accompaniment. It is really a matter of no importance whether it is dissolved before being taken or not, as the gastric juice of the stomach takes it up with the greatest ease. The ordinary dose of sulphate of quinine as a tonic is two grains three times a day before meals; but in fevers as much as forty grains may be given at a time. It may be obtained in two-grain tabloids and also in five-grain tabloids, and these will be found most convenient to take when travelling. The quinine wine is a useful preparation, and is a

favourite with children. The ammoniated tincture of quinine is made with sal volatile, and is a good stimulant as well as tonic. A teaspoonful in a wine-glass of water answers admirably in cases of fainting, quickly stimulating the heart's action. Quinine is one of our most valuable remedies, and without it life in many tropical and unhealthy climates could hardly be maintained. For a resident in India and the Colonies, there can be no more useful present than a bottle containing a thousand tabloids of sulphate of quinine.

Rhubarb is a purgative, but it must be admitted that it is not a very good one, for it contains an astringent principle which usually intensifies constipation in the long run. Still rhubarb is undoubtedly a favourite with many people, especially those who have inherited a gouty tendency. A compound rhubarb pill at bed-time is a favourite prescription, and the consumption of rhubarb pills in this country must be something enormous! The compound rhubarb powder, or Gregory's powder, is commonly given to children; but it cannot be said that it is a favourite with them. It is rather more nasty than most purgatives, and is not more prompt in its action.

Saccharine has of late been largely employed as a substitute for sugar. It is undoubtedly useful in cases of gout, dyspepsia, and diabetes. An attempt was made to show that saccharine itself was harmful, but this has been disproved. The sweetness of saccharine is, perhaps, not so agreeable as that of sugar, but it is much more powerful. A very small tabloid of saccharine will serve to sweeten a large cup of tea or coffee, and a little tube of the tabloids will last a traveller for weeks. Saccharine is now extensively used, and bids fair to become a permanent favourite.

Sal Volatile is a most useful combination in all cases of debility and fainting. It is composed of carbonate of ammonia, strong solution of ammonia, volatile oil of nutmeg, oil of lemon, spirit, and water. The dose is a teaspoonful in a glass of water. The addition of fifteen drops of chloric ether will be found an advantage.

Senna is a useful laxative, and is usually administered in the form of the confection, the dose of which is a teaspoonful or more. It is also one of the constituents of black draught. Another prescription of senna, and a useful purgative for children, is the compound liquorice powder, which consists of senna, liquorice, fennel, sulphur, and sugar.

Sulphur.—There are two kinds of sulphur—flowers of sulphur, and milk of sulphur; but they have properties which are practically identical. The “stick” sulphur, or “roll” sulphur, is not used in medicine. Sulphur is usually given in the form of the confection, which consists of flowers of sulphur, cream of tartar, and syrup of orange-peel. The ordinary dose is a teaspoonful, but a table-spoonful or more may be taken. It acts on the bowels, producing motions which are soft, but not too loose. It is very useful in piles, hæmorrhoids, fissure, and other similar complaints. Sulphur has long been regarded as almost a specific for rheumatism, whether taken internally or applied locally. A sulphur lotion for use in various skin diseases is made as follows:—Flowers of sulphur, a teaspoonful; glycerine, two table-spoonfuls; rose-water, half a pint. Mix. To be applied to the part with a piece of lint, or an old pocket-handkerchief, as often as may be necessary.

Tabloids.—There are many advantages in giving drugs in the form of tabloids. They are prepared simply by compression by means of machinery, and are not mixed with any other drug or excipient. They are lenticular in shape, and are easily swallowed. They are extremely portable, and there is no possibility of mistaking the dose. They have almost entirely superseded pills, and are now largely prescribed. The following is a list of some of the most useful:—

Tabloids of antipyrin	- - - -	5 grains in each.
“ bicarbonate of soda	- - 5	“ “
“ bismuth	- - - - 5	“ “
“ bromide of ammonium	- 5	“ “
“ bromide of potassium	- 5	“ “
“ bromide of sodium	- 5	“ “
“ cascara sagrada	- - - 2	“ “
“ charcoal	- - - - 5	“ “
“ chloral	- - - - 5	“ “
“ chlorate of potash	- - 5	“ “
“ chloride of ammonium	- 5	“ “
“ citrate of caffeine	- - 1 grain	“
“ Dover's powder	- - - 5 grains	“
“ Gregory's powder	- - 5	“ “
“ iodide of potassium	- - 5	“ “
“ iodide of sodium	- - 5	“ “
“ lithia	- - - - - 2	“ “
“ nitre	- - - - - 5	“ “
“ pepsin	- - - - 1 and 5	“ “
“ quinine	- - - - 2 and 5	“ “
“ rhubarb	- - - - - 3	“ “
“ saccharine	- - - - ½ grain	“
“ salicylate of soda	- - - 5 grains	“
“ “soda-mint”	- - - - 5	“ “

These tabloids are of the exact size and shape shown in the accompanying figure (Fig. 1), and are packed in tubes holding a dozen or more (Fig. 2). Each tabloid contains the exact dose of

the medicine, so that there is no necessity for weights or scales.



Fig. 1.—TABLOID.



Fig. 2.—TUBE OF TABLOIDS.

Tabloid Triturates are very largely used both here and in America, and afford a very convenient means of administering small doses of active drugs. The process of trituration so finely subdivides the drug that it is immediately absorbed, and a smaller dose suffices to produce the desired effect. By compressing the triturate into a tabloid there is never any difficulty with regard to the dose. The following is a useful selection of tabloid triturates:—

Tabloid triturates of aconite,	one drop of the tincture in each.
“ “ arsenic,	one-hundredth of a grain of arsenic acid in each.
“ “ belladonna,	one drop of the tincture in each.
“ “ calomel,	one-tenth of a grain in each.
“ “ capsicum,	one drop of the tincture in each.
“ “ grey powder,	one-third of a grain in each.
“ “ mercury,	one-hundredth of a grain of the perchloride in each.
“ “ nux vomica,	one drop of the tincture in each.
“ “ opium,	one drop of laudanum in each.

Tar-Water is a valuable remedy for coughs and colds, and various domestic ailments. A gallon of cold water is poured on to a quart of tar and the mixture is stirred briskly for three or four minutes, after which it is allowed to stand for forty-eight hours. The clear fluid is the tar-water, and may be taken freely. It is a good plan to wash the tar first by letting a stream of cold water run over it, so as to get rid of any free acid or other impurity. The addition of a pound or two of white sugar makes a very useful syrup of tar, which may be given in teaspoonful doses to children. In the United States tar-beer is largely used, and is highly esteemed.

Vaseline—a petroleum product—was, at one time, largely employed as a basis for ointments; but Lanoline, obtained from sheep's wool, is now more generally used.

Domestic Remedies.—The following is a list of remedies adapted for domestic use:—

Tabloids—5 grains in each—of antipyrin.	
“ “ “ bismuth.	
“ “ “ bromide of potassium.	
“ “ “ chloral.	
“ “ “ chlorate of potash.	
“ “ “ chloride of ammonium.	
“ “ “ Dover's powder.	

Tabloids—5 grains in each—of gallic acid.
 " " " iodide of potassium.
 " " " pepsin.
 " " " soda-mint.
 " " " sulphate of zinc.
 " 2 grs. and 5 grs.—of quinine.

Tabloid triturates of aconite, one drop of the tincture.
 " " arsenic, one-hundredth of a grain.
 " " belladonna, one drop of the tincture.
 " " grey powder, one-third of a grain.

Chloric ether.
 Chlorodyne.
 Essence of camphor.
 Ipecacuanha wine.
 Laudanum.
 Sal volatile.
 Compound rhubarb pills.
 Iron pills.

Belladonna liniment.
 Soap liniment.

The tabloids take up but little room, and the whole collection may, if necessary, be packed in a very small compass. This leads us to the subject of—

Medicine-Chests.—Medicine pocket-cases and medicine-chests can be obtained of all shapes and



Fig. 3.—SMALL POCKET-CASE.

sizes. Messrs. Burroughs and Wellcome have devoted special attention to this class of medical conveniences, especially for foreign, colonial, or travelling use, and their chests and preparations are very highly spoken of by Mr. H. M. Stanley in his



Fig. 4.—POCKET-CASE.

book on the Congo. As Mr. Stanley there says, "They have sought the best medical advice, and really seem disposed to study the special needs of the East, West, Central, Northern, or Southern African traveller, soldier, trader, or missionary. I have informed them of the few diseases such as have fallen under my observation, and they have prepared such medicines as have been tried during the last seventeen years of my African experiences.



Fig. 5.—POCKET CASE.

They have prepared small doses in tabloids, which may be taken without creating nausea—a valuable desideratum, as all will admit who have suffered from the foul, nauseating smell of medicines as commonly prepared by druggists." The tabloids here referred to have already been described.

A very simple metallic pocket-case (Fig. 3), containing five bottles, can be obtained for half-a-crown: or, fitted completely, for three or four shillings. A case of this description might be arranged to hold sal volatile, chloric ether, essence of camphor, bromide of potassium, and compound rhubarb pills; or, better still, a selection of tabloids.



Fig. 6.—GORDON MEDICINE-CASE.

A morocco case, containing ten three-drachm phials (Fig. 4), may be obtained for 12s. 6d., and would answer most purposes. It would contain sal volatile, chloric ether, laudanum, chlorodyne, ipecacuanha wine, tincture of quinine, essence of camphor, tincture of iron, compound colocynt, and belladonna liniment; or some similar selection of drugs.

A calf-covered case, containing sixteen phials, costs about 16s. (Fig. 5), and may be conveniently fitted with the following selection of tabloids:—Antipyrin, bromide of potassium, quinine, Dover's powder, chlorate of potash, pepsin, soda-mint, iodide of potassium, salicylate of soda, eucalyptia, sulphate of zinc, bicarbonate of soda, blue pill, Gregory's powder, nitre, and sulphate of iron.

The "Gordon Medicine-Case" (Fig. 6), filled with portable medicines, enough to last three months, costs 12s. The engraving shows of itself how this case is usually supplied, the medicines being carefully chosen to furnish in small bulk immediate remedies for the usual complaints in a tropical country. For domestic use a case of similar size and fittings would, of course, be supplied differently.

The "Colonial Medicine-Chest" (Fig. 7) is well adapted for colonists, and costs about 15s. unfurnished, or, when filled with a large supply of



Fig. 7.

medicines, about 50s. The "Livingstone" is somewhat more expensive.

The "Model Medicine-Chest" (Fig. 8) is very complete, and costs, without medicines, 30s. The cost furnished will of course depend somewhat upon the selection of medicines, which will be materially affected by the climate, being entirely different for a tropical or marshy country from what it would be in an English country house, especially if a hunting country. The "Congo Medicine-Chest," as supplied

to Mr. H. M. Stanley, contains a large selection of drugs and instruments, and is adapted for a lengthy campaign, with special reference to the risks and ac-

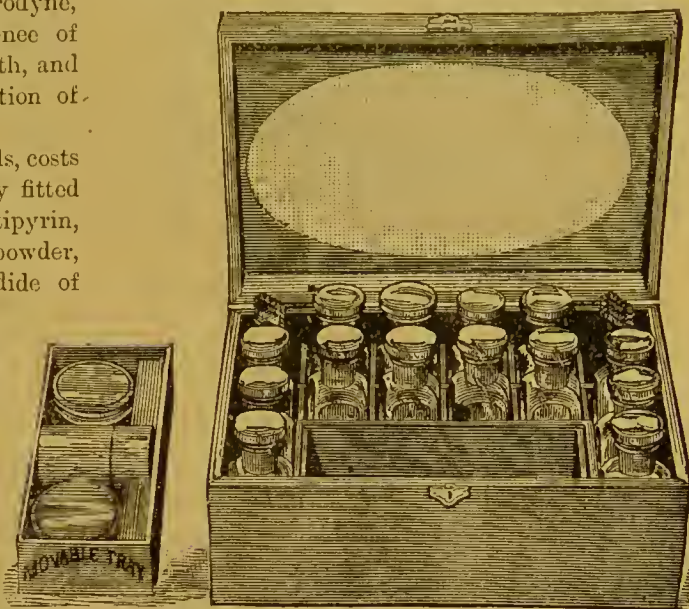


Fig. 8.

cidents, as well as diseases, likely to be encountered in tropical travel.

Thermometer Scales.—The following is a table of comparison of the Fahrenheit with the Centigrade and Réaumur's thermometer:—

Fahr.	Cent.	Réau.	Fahr.	Cent.	Réau.	Fahr.	Cent.	Réau.
212	100	80	149	65	52	86	30	24
203	95	76	140	60	48	77	25	20
194	90	72	131	55	44	68	20	16
185	85	68	122	50	40	59	15	12
176	80	64	113	45	36	50	10	8
167	75	60	104	40	32	41	5	4
158	70	56	95	35	28	32	0	0

Reductions from one scale to another are easily made by the following calculation:—Fahrenheit to Centigrade, deduct 32, multiply by 5, and divide by 9; Centigrade to Fahrenheit, multiply by 9, divide by 5, and add 32; Réaumur to Fahrenheit, multiply by 9, divide by 4, and add 32.

A medical thermometer should form part of the fittings of every household medicine-chest.

Weights and Measures.—For weighing solids a little pair of scales will be necessary. It matters very little about their form so long as they are trustworthy. They should be kept clean, and not allowed to get rusty. The dots on the small weights indicate the number of grains which they represent; whilst

the symbols ζ , \mathfrak{z} , and \mathfrak{d} mean respectively an ounce, a drachm, and a scruple. The symbols \mathfrak{zss} and \mathfrak{dss} mean half an ounce and half a drachm, the double *s* being a contraction of *semi*, or half. People who have forgotten their "tables" may be reminded that in Apothecaries' weight, by which medicines are ordered, 20 grains are equal to 1 scruple; 3 scruples or 60 grains, 1 drachm; 8 drachms or 480 grains, 1 ounce.

Fluids are measured, and not weighed, according to the following table:—

60 minims	- - - - -	1 fluid drachm.
8 fluid drachms	- - - - -	1 fluid ounce.
20 fluid ounces	- - - - -	1 pint.
8 pints	- - - - -	1 gallon.

The fluid ounce equals a *weighed* ounce of distilled water, and it is of course easier to measure other fluids by this quantity than to weigh every one. A minim is supposed to equal one drop, but drops of various liquids differ a great deal, so we have the fixed quantity of one-sixtieth part of a drachm.

The following list of domestic measures may prove useful:—

A teaspoonful	is approximately equal to	1 fluid drachm.
A dessert-spoonful	"	2 fluid drachms.
A table-spoonful	"	4 "
A wine-glass	"	from $1\frac{1}{2}$ to 2 fluid ounces.
A teacup	"	5 fluid ounces.
A breakfast-cup	"	8 "
A tumblerful	"	10 to 12 "

HOME MILLINERY.

A CELEBRATED milliner expressed the opinion some time ago that bonnets and hats could be trimmed at home both prettily and cheaply, if only people would be content to follow their own ideas, and not make bad copies. Doubtless this opinion was true; and yet the difficulty which ordinary people have to contend with is that they have no ideas of their own, and the consequence is that they are compelled to imitate the ideas of others, while in millinery even a capacity for copying is not to be despised. There is no doubt that, in millinery, expense can be saved much more easily and quickly than in dress-making. To make a dress fit well and be becoming is a serious business: it involves a good deal of labour, and also, to do it perfectly, it requires a long apprenticeship to the trade. Charts and patterns are very useful for women who make dresses for themselves and their children, and who are content if they are modestly and neatly attired; but for thorough dressmaking they are not sufficient. In thorough dressmaking so many changes have to be made, and so much judgment is required to be used, according to the size and style of the individual to be fitted, all competent artists agree in declaring that to make dresses well is by no means a simple straightforward matter.

In millinery, however, it is different. There the exercise of good taste, combined with the skill which comes from practice and perseverance, will enable anyone to trim hats and bonnets so that an ordinary individual would see nothing in them which it was desirable to alter, although a professional would probably detect at a glance that they had been trimmed at home. Persons, however, who wish to save expense are indifferent about the opinion of professionals, and the economy of home

millinery does not admit of question. Indeed, it is often said that "In these days only the rich and the utterly incompetent buy hats and bonnets ready-trimmed." Anyone with quick fingers and a little taste could easily produce for eight shillings a hat or bonnet which would cost a sovereign in a shop, and yet she would not need to devote more than one evening to the work. "A penny saved is a penny gained;" and to save twelve shillings in one evening is not bad business for persons with whom shillings are not too abundant.

The chief points which home milliners should aim at securing, especially when they are new to the work, is—first, Becomingness; and, second, Simplicity. Simple arrangements are always in good taste, and amateurs who attempt the elaborate and ornate are almost certain to fail; besides which, over-trimming is exceedingly vulgar. Indeed, it may be laid down as a rule that though home millinery is decidedly economical, it is not successful from any other point of view if there is the slightest suspicion of vulgarity. It will, perhaps, be remembered that in one of those delightful satires of Du Maurier's which appeared in *Punch* a few years ago, a thoughtful mother is represented as saying to her boy, "Do not forget, my son, that it is not the coat which makes the gentleman." "No, mother, I know," replies the promising juvenile; "it is the hat!" This jest expresses a half-truth. Persons who estimate others according to their dress are always influenced more by the head-gear than they are by any other part of the attire; and consequently ladies who consider dress of importance should be especially careful about hats and bonnets.

Authorities are accustomed to say that in millinery becomingness is nine-tenths. One hat or bonnet

which suits the wearer is worth a dozen which do not, no matter how fashionable or stylish the dozen may be. This being the case, amateur milliners who discover that a particular shape in hats or bonnets is becoming to them, would do well to remain faithful to it, regardless of the changes of fashion. This is all the more advisable, because shapes alter so quickly that a person who tried to keep up with the mode would never be at rest. A becoming shape, however, is always a pleasure; and with this for a basis, it is easy to make small changes in attire, in the way of differently-coloured bows or flowers, which produce the effect of a new bonnet, while costing scarcely anything.

From the point of view of becomingness, the height of the hat or the bonnet is an important consideration. The vagaries of fashion are many, and every now and again fashion decrees that hats and bonnets shall be worn very high. Short people usually adopt a mode of this description with alacrity, thinking that by this means they will add to their height. This is a mistake; and in this connection it may be well to quote some remarks published on "Taste in Dress," written by the great artist, Mr. G. F. Watts. In a paper which appeared in the *Nineteenth Century*, Mr. Watts said:—

"Attention may be called to the fact that bigness and tallness are not the same things, though they are commonly confounded with each other. A person may be of tall proportions on a small scale, and of short proportions on a large one. A model of Apollo may be two feet high, preserving the heroic or divine proportions, tall as a god; while a model of a dwarf may be ten feet high, having still the stumpy proportions of a dwarf. Now, according to this, fashions that create or increase a disproportionate size of head cannot be in good taste; and the habit of piling up enormous masses of hair" (and, it may be added, of wearing a very high hat or bonnet) "needs no comment. The Greeks, with their fine taste, reduced art instincts to a science; they never violated, by top-heaviness in their sculpture, the sense of security which the upright tower of the human form should suggest: and to overweight the upright human figure is to distort that fitness without which there is neither harmony nor beauty. It will be in better taste, if a large hat or bonnet be worn, to make it of light materials; while one of denser materials should be small.

"A great mistake is also made when it is supposed that a small stature can be made to look taller by piling up a quantity of hair" (thus adding to the height of the head), "for the only result is to put the face in the wrong place. A dwarf a foot high would still appear to be but a foot high, though a

structure ten feet high were placed on his head. The apparent length of an individual is up to the eyes; indeed, the height of the shoulders determines the impression more than anything else. A man 5 feet 8 inches, with a pad a couple of inches thick, will look like one 5 feet 10 inches. It cannot, therefore, be wise or in good taste to try by artificial means to give the appearance of height and length of line which Nature has denied."

One of the advantages of doing millinery at home is that it enables people who would otherwise have to wear cheap materials, such as cheap ribbons, cheap lace, cheap feathers, &c., to wear material of good quality. It is well to realise, that nothing is more costly in the long run than cheap millinery goods; they soon get shabby, and they always have a common look. But material of good quality endures. Good ribbon, for example, actually keeps clean longer than cheap ribbon, and it does not crease or become limp so quickly; while good straw looks handsome to the end; it retains its shape long after the cheap straw is thrown aside and forgotten; and it can be cleaned, dyed, and altered again and again; for the width of the brim makes a great difference in the shape of a hat; and a superior straw which has already done good service may be made to look like a new one by having one or two strips taken from the brim. Good feathers and good lace also are an investment, and good lace is universally becoming. A good ostrich tip, which costs ten or twelve shillings in the first instance, can be worn for a dozen bonnets in succession: it can be re-curved at home again and again; it will never get out of date; it will stand in the stead of yards of ribbon, and will look handsome all the way through: whereas a small tip that costs a shilling or so can be worn for a short time only, and, excepting for two or three days, will always look poor. So with lace: real black lace is a treasure, and it makes any hat look good and superior. It keeps its colour a long time, and when it becomes brown it can be re-dipped and renovated to look as good as new. Common lace, on the other hand, loses its beauty after being exposed to one shower. Good material makes the most simply trimmed bonnet look at least lady-like.

It is worth knowing that feathers always look richer and more effective if a little puffed tulle is put round the hat or bonnet which they are to trim, and the feathers are brought over them.

In trimming a hat, the first thing to do is to line the brim. The quantity of velvet required for this purpose will, of course, depend on the width of the brim, and also on whether the lining is to be put perfectly plain or full. If it is to be plain, the velvet must be bought on the straight: the hat must be

put down on it, and the lining cut to fit. If it is to be full, the velvet should be bought on the cross and sewn to the wire. The needle should not be passed over and over the wire, but pushed backwards and forwards, in and out. If sewn over and over, the wire will show. To fasten velvet to the wire is much the easiest method of lining a hat.

When arranging the trimming on a bonnet or hat, it is necessary not to put it too tight; also to handle it lightly, and to pin it as little as possible. Nothing spoils ribbon like pinning it and twisting it about unduly. If it is thought desirable, bows may be kept firm by putting cap-wire inside; the business, however, must be neatly done, or it will have a very bad effect. In these days ribbon can be bought ready-wired. When a trimming is made of tulle or net, it is well to use a slightly warm iron in order to kilt it. When handling tulle in hot weather, also, it is well to dip the hands in cold water from time to time, as this preserves the freshness of the fabric. If material bought by the piece is used in the place of ribbon for trimming, it will be necessary to line the bows either with something of a colour which contrasts well with the original colour, or with stiff muslin or net. Of course, when net or muslin is used, it must be kept well out of sight; if it were visible, it would look very untidy. The best way of securing this result is to make the lining narrower than the material; to lay the two fabrics one upon the other, with the right sides inside; to run the edges of the two materials together on three sides; and then to turn the bow inside out. Also it is well to remember that when ribbons of velvet or plush have to be ironed, they should never be laid on a table for the purpose; the best way to deal with them is to get someone to hold them up, and to iron them while in this position with a not very hot iron.

A hat ought always to match either the jacket or the dress, for unless this can be, the costume will be wanting in harmony. In winter weather it is most economical for the hat to match the jacket rather than the dress, because the dress is changed the more frequently of the two.

A head-lining should always be put in last of all; even the elastic is best put in first when it can be managed, although amateurs find it awkward to do this, because the elastic gets in the way of the needle, and is caught by the thread. The lining should be fastened round the velvet, turned over, and drawn up with a running-string of China ribbon. Nothing but practice will enable a person to put in a head-lining neatly.

The comfort of a bonnet depends very much on the position of the strings. They should never be put too far back; if they are, they make the bonnet feel

as if it were being dragged off; nor should they be too far forward, or they look dowdy. The aim should be to put them as near as possible to the widest part of the head, without cutting it too short.

The comfort of a hat or bonnet depends also upon its being suited to the season. It is a great mistake to have a heavy hat for summer wear; and on this account beads are to be avoided in summer, because beads are always heavy. White hats are much cooler than dark hats; and a broad-brimmed hat, which shields the face from the heat of the sun, has prevented many a headache. The modern fashion of turning up the brim of a hat behind is objectionable, because it leaves the back of the neck (a most sensitive part of the human frame) without shelter.

Though white hats are cooler than dark hats, yet, from the point of view of becomingness, a white hat with a black lining to the brim is to be preferred to one with a white lining. A fair complexion always suffers by having a mass of white close to the face.

In summer-time light, pretty, graceful hats may be produced for very little by an individual who has skilful fingers and a faculty for using odds and ends. Straw hats and bonnets can be trimmed again and again with scraps and oddments; and one advantage belonging to straw hats and straw bonnets is that they can be altered in shape. Amateurs sometimes forget this, and will cast aside a good straw before it is half worn out because its shape is old-fashioned, when for a shilling or two they could easily have it put on a fresh block and re-modelled. Good straws are, indeed, always valuable; and if a good straw cannot be afforded, it is most economical to procure a wire shape, and cover it with tulle or velvet, rather than to buy a common straw. Yet even a wire shape should be bought at a good shop, because a high-class wire shape fits the head so much better than a common one. The difference in price between a common shape and a good one is only a few pence, yet the difference between the two, as determined by the comfort of the wearers, is incalculable.

When caps are in fashion, their manufacture constitutes a very important branch of home millinery. They are most easily managed when a proper foundation is used, and these can be bought ready for use. It is worth remembering that the trimming can be arranged on soft foundations much more easily than on stiff ones; and that no amount of expensive trimming makes up for a cap not suiting its wearer.

The talent for trimming hats, bonnets, and caps prettily and quickly is a most profitable and convenient one; yet, to a great extent, it is the result of practice. Power to do work of this kind grows with exercise, and there are many adepts in home millinery whose first attempts in this direction were regarded by their friends as nothing but a joke.

SPRING CLEANING.

SPRING cleaning is a term of terror, especially to the male part of the household, and, for that matter, to everyone who dislikes *tapage*, and does not find music in the sound of the broom and scrubbing-brush. There are housekeepers, and good ones too, who say that every part should be kept so clean that no spring cleaning need ever be necessary. This may hold good of the kitchen premises, of bedrooms in which there is no continual fire, and of the hall and passages. But rooms that are in perpetual use and are lived in every day and all day long, really do require a spring clean, and the time for it is when winter is so far gone that fires may be either dispensed with altogether, or only lit on very cold or wet days or other comfortless occasions; for it is a misery-making rule not to have any more fires merely because the house has had its spring clean.

The golden rule as regards spring cleaning is not to make it burdensome, and not to turn the whole house out of windows at the same time. One large or two small rooms are quite enough at once, and the living-rooms should be done one at a time completely, not drawing and dining rooms both upset, and neither of them finished and made comfortable again. If the head of the house has a special den, study, or sanctum, it should, if possible, receive its spring cleaning when he is away, so that he may neither see it turned topsy-turvy before he goes out, nor find it so on his return home.

"Many hands make light work," is an old saying very applicable to house-cleaning, and though it is often desirable to get in extra help, that depends very much on the servants kept, and the ability of the mistress to direct. It is only a vexation of spirit to employ a charwoman, and find that she gossips away her own and other people's time, or makes more work than she does, or by dint of vigorous scrubbing and "cluttering" about, injures paint, cracks windows, wrenches fastenings, and generally sets the housekeeper's teeth on edge. But a charwoman who has been a thoroughly good housemaid is a treasure, to be gladly called in and thankfully made the most of. Such an one will never lack work; for in this, as in every other walk of life, it is the incapable and idle who are always out of employment.

How not to do it is much to be considered in spring cleaning; for instance, it should not be begun on the day of the family wash (where there is one), nor yet when visitors are expected, nor when any member of the household is seriously ill. Hard and fast rules about beginning to clean on certain days of certain months, or not beginning fires till a fixed date, are extremely stupid, and only made by foolish folks to be broken by sensible ones. But supposing that a

suitable day is fixed upon—Monday for choice, because everyone starts on a fresh bit of business with so much more heart at the beginning of the week—the first thing to be done is to move out all the furniture, if possible, and to cover up carefully what must remain. Then take down all pictures and mirrors, and dust them behind and before, and in every nook and cranny, and send them to a place of safety in another room. The curtains must also come down, and, if possible, the cornices and curtain-poles; for though it is often necessary to make the best shift one can to clean them *in situ*, it is much better and more effectual to have them down for the purpose.

The Carpets.—Last of all comes the carpet, which is very easily removed when all or most of the heavy furniture is out of the way. When rolled together, this should be taken out of doors in fine weather where there is a garden, or sent right away to be beaten or cleansed in one of the establishments for the purpose which in towns are now quite common. For thorough purification there is nothing to beat these places, where carpets are cleansed by steam; a Turkey carpet will look perfectly new, so far as colours are concerned, after being subjected to this mode of treatment; and for dwellers in a town it is the one course to be pursued, for if carpets are merely taken away to be beaten, they are usually conveyed to some piece of waste ground exposed to all sorts of abominations, and the least harm that can happen to them is to absorb the dirt and dust of the carpets that have preceded them.

Where there is a large garden, and grass at a convenient distance from the house, the carpets can be admirably treated; but where the grass-plot is within a short distance of the windows, they should be closed during the beating of the carpets, or the dust that has been carried out goes back again. The best way is to hang the carpet over a good strong line and belabour it with sticks; not with gentle pats, as if there were danger of hurting it, but with downright blows from brooms and stout walking-sticks, each of which produces a cloud of dust. If the grass be clean and dry, a drag over it freshens the carpet, but this is much to be deprecated in dirty weather.

An old-fashioned and very effectual way, after the carpet was beaten, was to lay it flat and brush first on the right and then on the wrong side with a stiff hand-brush. Then to have some fresh ox-gall, mixed with warm water and soap, so as to make a lather, and wash about a yard of carpet at a time with a flannel and this mixture, wiping each portion as dry as possible with dry cloths afterwards, and finally to

hang the whole carpet across a horse in the kitchen for the night, leaving a tolerable fire, or else hang it out to dry and sweeten in the sun. But for this process the ox-gall must be fresh; if stale, it is semi-putrid, and the carpet never loses the disgusting smell. Nevertheless, there are housekeepers who would rather have stale ox-gall than none at all; but then they are people brought up, as they would say of themselves, "not to take any notice of smells."

Room-Cleaning.—Returning to the room from which the carpet has been removed, the floor will probably be covered with a thick layer of dust, which must be well sprinkled with water, or a plentiful supply of wet tea-leaves or sawdust thrown down, before it is swept up.

The next step is to have the sweep, and though in these days little boys are not sent up chimneys as they used to be, someone really ought to make sure of seeing the circular brush out at the top, if the shape of the chimney admits of it. In towns the sweep carries the soot away, as a matter of course; it would be matter very much in the wrong place if he left it behind; but in the country he receives a trifle in addition to his ordinary charge, and leaves the soot for the use of the gardener, to whom it is invaluable. The room, in all probability, will require a second light sweeping when the man of blacks is gone.

If the walls are to be stripped and re-papered, the ceiling whitewashed, and any painting to be done, this is the time to do it; and since it is never worth while to paint *over* dirt, it is as well to wash all parts that are going to be painted, with soap and water, which will help to rub it down, though the painters will repeat the process with sand-paper and pumice-stone. But if this is not to be done, the room must have different treatment. A damp duster, tied over a broom, will cleanse the cornice, and a clean hair-broom must be used for the ceiling. It will bring away an immense amount of dust and dirt. The paper can also be brushed down with a clean damp duster over a broom, or with a clean hair-broom dipped in clean water and well shaken before being used—that is to say, unless this would injure the paper; if it would, a dry sweeping with a clean broom will suffice.

Here is another plan which was more in vogue when wall-paper was an expensive luxury than it is now, but is, nevertheless, efficacious. First blow off the dust with the bellows. Divide a white loaf a week old into eight parts. Take the crust into your hand, and beginning at the top of the paper, wipe it downwards in the lightest manner with the crumb. Do not cross nor go upwards. The dirt of the paper and the crumbs will fall

together; you must not wipe above half a yard at a stroke, and after doing all the upper part, go round again, beginning a little above where you left off. If you do not wipe it extremely lightly, you will make the dirt adhere to the paper. It will look like new if properly done. It goes without saying that after this operation the floor must once more be swept over.

The blinds, if of linen, should be brushed down; and if Venetians, they should be taken apart, every slat wiped with a wet flannel and dried, and slipped into the ladder again. Next comes the paint, and this was the way in which our grandmothers and their handmaidens cleaned it, and taught those who came after them to do the same:—

Never use a cloth, but take off the dust with a little long-haired brush, after blowing off the loose parts with the bellows. With care, paint will look well for a length of time. When soiled, dip a sponge into soda and water, pass it over the slat, then wash the soda off quickly, and dry immediately, or the strength of the soda will eat off the colour. When wainscot requires scouring, it should be done from the top downwards, and the soda be prevented from running on the uncleaned part as much as possible, or marks will be made which will appear after the whole is finished. One person should dry with old linen as fast as the other has scoured off the dirt and washed the soda off.

For want of taking this last precaution of wetting a small piece at a time, thoroughly washing the soda off and drying at once, it has come to be a sort of tradition among housekeepers that soda spoils paint. In these days we use a great many kinds of soap which are specially adapted for cleaning paint, such as the modern soft soap, which is as much more refined than the old stuff, as golden syrup is than the old-fashioned treacle. This must be rubbed *on* the damp flannel, *not* put into the water; and if not more than a yard of paint be washed with it at one time, and then rinsed and dried, it will prove to be beautifully cleaned. Brooke's soap, Sapolio, Jeyes' "Perfect Purifier," and other soaps, are very valuable for paint and general house-cleaning; and Hudson's extract of soap, which is a powder to put into the water, is very useful for this purpose.

All these soaps are good for scrubbing the boards, which should be done as soon as the paint is cleaned. Great care should be taken when scrubbing those of an upstairs room (or, indeed, any room that has a ceiled room under it) not to use too much water, or it will go through the cracks between the boards and damage the ceiling underneath. A mode of washing floors that was much in vogue when bedrooms were left with bare boards and only had bedside carpets laid down, is still to be commended as a preparation

before staining the boards, for the appearance of the staining depends very much on the state in which the boards were previously. We must also point out the value of sponges in cleaning; they are not used here very much, but on the Continent they are universally in request, and servants, instead of dusting with a dry duster, usually apply the damp sponge first to everything but furniture. About washing boards, however: after washing them very nicely clean with soda and warm water and a brush, wash them with a very large sponge and clean water. Both times observe to leave no place untouched, and clean straight up and down, not crossing from board to board; then dry with clean cloths rubbed hard up and down in the same way.

Bare floors should not be often wetted, but very thoroughly when done, and once a week dry-rubbed with hot sand and a heavy brush the right way of the boards.

To Clean Old Oak.—The few who are so fortunate as to have old oak wainscot or panelling or stairs, must beware of scrubbing them with soap, soda, and hot water, as it deadens the appearance. Here is an old recipe which has never been surpassed:—If greasy it must be washed with warm beer; then boil two quarts of strong beer, a bit of beeswax as large as a walnut, and a large spoonful of coarse moist sugar; wet it well over with a large brush, and when dry rub it till bright.

This is almost equally good for oak-stained boards, and it is not at all necessary that the beer should be drawn fresh from the cask, for in almost every household where beer is taken as a regular thing there are half-glasses left, a little more drawn than is wanted, and so forth: small wastes which, nevertheless, ought to be prevented, and may be if all such little quantities, instead of being thrown away, are put into a stone bottle and kept well corked.

The other polish for oak and oak-stained boards is beeswax and turpentine. Cut up any quantity of beeswax that is likely to be wanted, shaving it thinly into an earthenware jar; cover with turpentine, and set on the hot plate on the top of the stove, a little to one side. If, as it melts, the mixture seems too thick, add more turpentine; but guard against too much, or else in using it the smell of the turpentine overpowers that of the beeswax, and proves disagreeable. There should be a sort of "bouquet" of beeswax after it has been used.

This is also the very best polish for furniture; it requires the application of elbow-grease, but much of the latter applied to a little of the former prevents crevices being filled up with a sticky, half-greasy substance that, if ever removed, is only managed at the cost of much time and trouble.

Windows and Mirrors.—But to go straight on with our room. When the walls and ceiling are swept or otherwise made clean (whether by new paper and whitewash or the cleaning of the old), the blinds and paint cleaned, and the floor scrubbed, there are windows and mirrors to be cleaned, and the ordinary servant goes about each in the worst possible manner. As to window-cleaning, he or she plunges a chamois leather into water, thereby ruining it at once, and then rubs the glass dry with a duster, too often leaving much fluff and many streaks.

The right way in ordinary window-cleaning is first to have a sponge and wash each pane with it, rub dry with a linen cloth, and *then* polish with a *dry* chamois leather. It is very simple, but not one person in fifty ever does it.

A notable American housekeeper says: "There is a right and a wrong way to wash windows, and the following method saves both time and labour:—Choose a dull day, or, at least, a time when the sun is not shining on the window, for when the sun shines on the window it causes it to be dry-streaked, no matter how much it is rubbed. Take a painter's brush and dust inside and out, washing all the woodwork inside, before touching the glass. The latter must be washed simply with warm water diluted with ammonia—do not use soap. Use a small cloth with a pointed stick to get the dust out of the corners; wipe dry with a soft piece of cotton cloth—do not use linen, as it makes the glass linty when dry. Polish with tissue paper or old newspaper. This can be done in half the time taken where soap is used, and the result will be brighter windows."

It is rather curious that in America old newspapers are much recommended, not only for glass, but for plate, and almost everything that requires polishing. To households where many papers are taken this is worth knowing.

Then there are the mirrors, for which in olden days the practice was to remove the fly-stains and other soil with a damp rag; then polish with a woollen cloth and powdered blue. When tallow and mould candles were used, and required snuffing, as they did continually, the careful servant cherished the contents of the snuffers with the greatest care, considering that the very best thing for cleaning and polishing the looking-glasses of the house, and she was not very far wrong.

A little liquid ammonia in the water with which a mirror is washed just with a well-squeezed sponge, a dry cloth, and a chamois leather to polish with, gives a very good result in the way of brightness. The frames of mirrors can only be dusted thoroughly, unless they are known to be of the very best gilding.

and then they, as well as picture-frames, can be cleaned with a little water, a flannel, and dry dusters. The glass is best washed with soda or ammonia and water, dried and polished.

Marble.—Marble chimney-pieces, consoles, and slabs of any kind on tables, sideboards, or washstands, are very apt to get stained and discoloured, and there are various ways of cleaning them; but mere dirt and stains caused by liquids being spilt can very often be removed by a vigorous application of Sapolio. Deeper stains can be taken out by a somewhat lengthy process, but one well worth trying when there is plenty of time, as, for instance, when the family is away for a few weeks, or where a house or part of it is closed for the winter. Mix equal parts of soft soap, quicklime, and caustic potash, apply with a brush, and leave on for several days. Then wash off, and apply more from a supply kept in a stoppered bottle. If improving apply yet again, till clean.

Marble may be cleaned pretty speedily by mixing up a quantity of the strongest soap-lye with quicklime to the consistence of milk, and laying it on the marble for twenty-four hours; clean it afterwards with soap and water. But this will not take out many stains.

This is another way of cleaning marble:—Take two parts of common soda, one part of pumice-stone, and one part of finely powdered chalk; pound finely in a mortar; sift it through a fine sieve, and mix it with water; then rub it well all over the marble, and superficial stains will be removed, being in fact scoured off; then wash the marble over with soap and water, and it will be as clean as it was at first from any merely surface stain. But if a stain has gone deep, and any chemical combination has been formed with the marble, even such scouring may be insufficient, and the only remedy may be to have it rubbed down to a fresh pure surface and re-polished. There is still one more expedient that may be tried first. After cleansing with warm water, apply a little oxalic acid dissolved in water, taking care to rub on and off quickly, with a small piece of cloth, and not to soak with it; and after a few minutes rubbing again with lime and water to remove the acid. If either of the above processes remove the polish, it can be restored by rubbing, first with chalk and water, and finally with water and putty powder, applied with a cloth.

Stone Floors.—Where candles are used for going about the house, grease is sure to be dropped, unless those candles are well protected by glass shades; and grease on boards, stones, or encaustic tiles is very unsightly. It is generally easy to re-

move such spots with a little strong lye made from caustic soda or potash, to which some quicklime may be added for applying to stones. Caustic lye will take the colour out of boards; therefore it should be washed off very quickly.

Where stone staircases, halls, and passages have to be cleaned, there are various ways of doing it. Dipping the flannel in mason's-dust is preferred by many people, and is admirable for doorsteps and stone window-sills. Bath-brick is particularly good inside a house; but where ladies are in the habit of wearing black dresses, both are objectionable, as the white comes off. The following is an old way of making a wash that does not come off nearly so much, but is scarcely so white as either Bath-brick or mason's-dust:—Boil a pound of pipemaker's clay with a quart of water and a quart of beer, and put in a bit of stone-blue. Wash with this mixture, and, when dry, rub the stones with flannel and brush.

At house-cleaning time, such endless quantities of cloths, dusters, flannels, &c., are used and really rubbed to pieces, that it is quite worth while economising in these items. An old worn-out blanket cuts up into very good house-flannels; and old woollen stockings, if cut down the seams from top to bottom, make good flannels for paint-cleaning and all such small work. The leg of an old cotton stocking, thus cut down, makes a capital duster, fit for any of the purposes for which "linen cloths" are mentioned in describing different modes of cleaning. Whatever provision of soft rags, &c., may be made before spring cleaning begins, it is certain that the ordinary stock of dusters, &c., will be so hard-used that very few of them will be worth anything afterwards. Therefore, after the cleaning is well over is the time to give out a new stock of dusters, tea and glass cloths, round towels, and one or two chamois leathers. There is a new material, called "Hathersall's Chamoisine," which answers all the purpose of the leather, and produces an even better polish.

Matting and Floor-Cloth.—A great deal of straw and Indian matting is used in these days, and the way to clean it is to dip a soft cloth in warm salt and water, and wring it out, only wetting the matting sufficiently to remove dust and stains. Matting may also be cleaned with bran-water. Put two handfuls of bran in a bag, and throw it into about a gallon of boiling water. With a wooden spoon press the bag against the sides of the boiler, so as to get all the goodness of the bran into the water. When cool enough, dip a flannel into this water, wash the matting with it about a yard at a time, and dry immediately with a linen cloth.

The floor-cloth, where there is any, should never be cleaned with soap, but first swept, and then wiped

with a flannel dipped in clean warm water, and when all dust and spots are removed, rubbed with a waxed flannel, and then with a dry plain one; but use little wax, and rub only enough with the latter to give a little smoothness, or it may endanger falling. Rubbing now and then with milk, after the above sweeping and dry-rubbing, gives as beautiful a look, and the cloth is less slippery, but still quite slippery enough. Some people prefer, after washing, to rub in a very little linseed-oil. The scrubbing-brush must never be used upon floor-cloth, and the wet should be wiped dry at once.

Furniture.—All furniture should be cleaned before it is carried back into the room from which it has been turned out, though of course the heavier pieces must be cleaned where they stand. Vinegar and water is very good for washing furniture with; but oak, polished or unpolished, will bear soap and water, rubbing with a flannel and drying. Then apply, with plenty of elbow-grease, the turpentine and beeswax polish already described.

The best kind of brush for the woodwork of chairs, sofas, &c., has bristles at the end; and the best brushes for polishing floors have a strap across the back, into which the hand goes.

The cane-bottomed chairs so generally used in bedrooms sometimes get full of dust and very dirty. After being well beaten, they should be scrubbed on the under-side with hot soapsuds, and dried in the sun.

If any white spots appear on floors or furniture, rub them with spirit of camphor on a flannel. Darker stains may often be removed with a little oxalic acid and water, rubbed on with a cork hard and diligently, the place being afterwards washed with water, dried, and polished in the ordinary way.

An old mahogany table that is really handsome and valuable, but stained and discoloured beyond endurance, may be made a thing of beauty by having the French polish removed with spirits of wine, and then being polished in quite a different way. First rub with vinegar, and then paint it over with boiled linseed-oil. Let the oil remain as long as it conveniently can, and wipe off. If the table must be used, cover with newspapers and a blanket, felt, or old woollen table-cloth, over which the ordinary one can be laid. Every night after the last meal, or just before going to bed, paint over with linseed-oil, let it soak in during the night, wipe off in the morning; and whenever there is a little time to spare, let as many pairs of strong arms as are available rub with oiled flannels and dry cloths. The polish thus obtained is the real polish of the wood, in which all its rich colours and delicate veinings are brought up, and hot dishes never make

the white mark on it that they do on French polish. As the fashion is again coming up of removing the cloth for dessert and placing the dishes on the table, it is very desirable to have one that is intrinsically handsome. The process may be hastened by adding to the linseed-oil a little alkanet root and rose-pink.

Book-cases should be entirely emptied, and all the corners well dusted out with a dry brush, the polished parts cleaned like the other furniture. If possible, move the case away to clean the wall and flooring also. Meantime all the books will have been piled in another bare room, and before being returned every volume should be first dusted with a brush, then have any dust banged out of it, and finally dusted carefully again after this process with a cloth.

Grates.—It is very much the custom now to black fire-places over, when the spring cleaning is done, with Brunswick black, but this must be carefully put on with a brush, and great care taken not to black the sides of the mantelpiece; but when a fire is lit the Brunswick black does not smell nice. A black mixture, which is not open to this objection, is the following:—Boil about a quarter of a pound of best black-lead with a pint of beer and a bit of soap the size of a walnut. When that is melted, dip a painter's brush in the mixture and wet the grate, having first brushed off all the soot and dust; then use a bard brush till of a beautiful brightness.

But supposing that the grate has bright steel bars,—which, though not as fashionable as they used to be, are still frequently met with, and slipped into the stove for summer appearance—they must be carefully cleaned, and the way to do it is to scour thoroughly with a thin paste or cream made of emery-powder and oil, applied freely with a cloth. When all the dirt is off, wipe clean and polish with fine emery-paper or fine emery-powder on chamois leather, which should be slightly greased, or smeared lightly with vaseline and oil, as the least trace of damp will cause rust.

Staining Floors.—We have now considered all the cleaning of the room—furniture-polishing, cleaning any floor-cloth there may be, cleaning walls, grates, floors, windows, mirrors, and every other part in detail; but one possibility, and that a very common one, has hitherto been omitted. We will suppose that the housekeeper has suddenly become a convert to the fashion of having stained and polished floors, either all over the room, or as a border, preparatory to having new carpets, which will come all the less expensive for not having so many yards in them, or possibly with the idea of removing all the shabbiest parts of the old carpets and re-sewing them into

squares or oblongs. We have already spoken of the best way of cleaning the boards in preparation, and must now add that cold air will be likely to come up between the divisions of the boards, unless they are very closely laid, if every open space is not filled in with putty.

Of course, instead of doing all this at home, persons with whom expense is no object may send to any first-class upholsterer's in the neighbourhood, and they will send down an experienced workman with putty, stain, brushes, &c., and he will make a thoroughly good piece of work; but so many of us live where the services of such people cannot be obtained, or at least not without much more cost than it is worth; and the small country carpenter can very rarely be trusted, because he has an inveterate notion of putting on a coat or two of size and some inferior stain over it, through which the size always shines with a milky, gruel-like gleam, that will not yield to polish.

Very good oak-stain may be bought in quart or pint tins from respectable ironmongers, or in large towns from oil and colour shops. It should be laid on with a broad brush. If, by chance, any spot appears a little darker than the rest, go over it with a brush dipped in clean turpentine.

If the room is large, and you intend to stain it all over, the effect will be very much improved by making a border, and when once the border is marked out there is scarcely any additional trouble; but it does not look very nice unless the boards are closely laid. A long flat ruler or plank is the easiest thing for women to rule by; men usually prefer continual measuring with a foot-rule to secure a uniform distance from the wall, and with the aid of the same implement ruling a dark line with a carpenter's pencil from point to point. Four inches from the wall is a good distance for the first line, and three inches from that for the second. This gives a band three inches wide. If a second one is wished for, it is best to rule it three inches from the first. If the room has one or two bay-windows, the bands must be carried round in accordance with the shape.

Now it stands to reason that if there are any blotches of a dark colour on a light one they show, but if a light shade underlies or spots a dark one it is less likely to show; and for this reason the light bands should be done first. Mix the lightest shade of stain you wish to use, and brush over the first three-inch band with it. Leave it for a few hours to dry, and then put darker staining on the four-inch space next the wall. When that is done you can proceed with the light stain on the second band, and, after leaving it to get quite dry, stain the space between with the darker shade, and then go on with the middle of the room. Always use the brush the length-way of the boards. When all is done and

quite dry, brush a thin coat of shellac varnish all over the staining quickly yet thoroughly, so that it has not time to harden and get milky. The effect of staining bands of two shades in this manner is to make the floor look like parquet; but it is not every-one who has the gift of laying on colour in even lines.

Carpet-Laying.—Where there is only a border to be stained, it is the last operation before putting down the carpet. Rugs can be laid down on a floor that is stained all over without nailing; but if all the centre of the room is to be covered with carpet, it must be nailed if it is to be safe; and as the part of the room nearest the fire-place is always most used in winter, one straight edge ought to be brought up as close as possible to the fender or hearth, unless there is a large hearth-rug to put down there.

But if there is an invincible objection to having Brussels carpets nailed down, they must be turned face downwards on a boarded floor, tacked out to the full extent, and thoroughly wetted on the back. When dry they will lie quite flat for some time, but the process may have to be repeated.

A new carpet really ought to be put down for the first time by professional hands, and one that has been re-made—that is to say, has had fresh seams sewn in it—needs almost as much care and strength. A carpet-stretcher, which is pretty much like a large strong fork with iron prongs, is needful for this operation; but the owner of the carpet, especially if it be a new one, will feel as if every tear given to the carpet by the use of a stretcher in inexperienced hands is tearing coin out of her purse, to say nothing of rending her heart. A new carpet put down for the first time by an amateur is likely to require re-laying in a few months, when it has been well trodden on, as it will stretch.

A plentiful supply of small black carpet-tacks and a light yet strong hammer are required, and when down the carpet should be swept over with a brush into a dust-pan, to remove any stray tacks, which are very uncomfortable to tread upon, besides cutting the carpet, and quite spoiling the stained boards if they get on them.

Curtains.—The curtains are the last things to go up. If the winter curtains have to be replaced in their old position, they must be well brushed and shaken first, perhaps re-dipped, and thereby cleansed and freshened. But if they can be altogether replaced with lace or muslin, the room is as light and fresh and elegant again; and of all muslin curtains, the cream Madras muslin or printed muslins of the same nature are the best, for they keep clean long, wash easily, and drape well.

When all these things have to be attended to, one room is quite enough to turn out at a time and put to rights again, and there is the pleasure of having the clean, sweet room to live in while the others are cleaned.

Order of Cleaning.—There is no doubt that the orthodox way of house-cleaning is to begin at the very top and work downwards, sending all the dust and dirt to the lower regions as the process goes on; but it is not always convenient, and in a vast number of households the rooms that are most *en évidence* must be first done, remembering that bedrooms can be cleaned one at a time, when circumstances permit—when two or three of the children go to stay with grandmamma, or when the girls and boys have gone back to school after the spring vacation, or, in more grown-up days, when one or two of the daughters are away on visits. This is why we have given prominence to the sitting-rooms, halls, passages, &c., which must be kept bright and nice.

But suppose the master and mistress of the house have migrated into the spare room, in order to have their own ordinary abode cleansed after the winter fires, and the closeness produced by many days on which it has been impossible to have the windows open: the first thing to be done is to turn out the cupboards and, if possible, the winter clothes that may be past wearing. It saves much accumulation of dust and dirt if any of these that are unfit to be worn again can be picked to pieces, all the actually worthless, rubbishy parts burned, and the remainder washed, brushed, sponged, or sent to the dyer's or cleaner's, as the case may be. If the cupboards can thus be freed before the actual cleaning begins, it is a great help, because the cleansed garments take up very much less space than they did when hanging just as they were taken off. In putting away all these treasures and stores, that will have to be taken out and made the best of in autumn, it saves endless bother if all woollens, all silks, all ribbons, trimmings, &c., are sorted out and placed together in separate boxes or bundles.

Bedsteads and Bedding.—Clear everything that can possibly be cleared out of the room—have all dust brushed off tops of doors, windows, ceiling, walls, and every possible lurking-place, whether there is to be papering, painting, and whitewashing, or not. Thoroughly brush and examine the mattresses and beds, and, when confident that you have done your duty by them, move them out of the room. Next take down the bedstead. No matter how clean it looks, it ought to come to pieces and be thoroughly examined and cleaned once a year, for in

these days of much locomotion and brushing against many people in trains and trams and omnibuses, no one knows how readily insect pests may be brought into the cleanest houses, either in clothes or luggage; and these creatures never die a natural death from change of air or uprooting, but straightway find themselves a comfortable abiding-place, and go on with the business of reproducing their species as though they felt perfectly at home.

In very few English houses do wooden bedsteads still exist, though there are exceptions to this as to every rule; and to the prevalence of B flats, Norfolk Howards, or, to put it plainly, bugs, in our centres of population, do we owe the almost universal custom of using iron bedsteads. There was a time when people imagined that the noxious insects could not live on the cold iron, but that is a terrible mistake; they congregate under the buttons the iron slats are fastened to, and colonise where these cross each other. Where perpetual war is waged against them they make, as if by instinct, for the highest point; and large ones will actually insinuate themselves into the screws where brass knobs finish off and hold together the upper portions of the bedstead.

Every part of an iron bedstead can be washed in strong hot soda and water, and if there are any crevices or flaws in the casting, in which there may be eggs or insects, a mixture of white lead and sublimate of mercury can be pressed into them with an old knife, or the sublimate may be injected from such a little can as is used for oiling sewing machines. It is a great mistake to keep up the same bed-hangings winter and summer, in rooms where these creatures are known to exist. If hangings there must be (and some people think them very cosy, and dislike being without them), let them be of washable kind, and have them washed two or three times a year.

It is, however, hopeless to examine the bedsteads and bedding alone, for bugs get into the paper and into the plaster on the walls, and the boards of the skirting, to say nothing of the floors. In old London houses, and too often in new ones—where they have come with old bricks, old timbers, and plaster rubbish—no second paper should ever be put on the walls without stripping off the first; and every crevice that can be seen should be treated with the white lead and sublimate of mercury. The best housewife can do little more than keep insects at bay in some dwellings, for they get into the wooden framework of sofas, chairs, and all sorts of furniture. When they begin to get under the rounds of leather dotted over the mattresses, and into the corners and creases of them, they must indeed abound, for they prefer the iron and wooden structures on which the bedding rests, and only overflow, as it were, on to the bedding when there is no longer room for them

in places that are more secluded and less suspected. Systematic and energetic effort will do wonders; but if it fails to subdue the enemy in an old house, the only remedy is to seek another habitation.

The time to wage war against them is emphatically the spring, when every large one discovered and destroyed checks the development of coming generations. In the country they are comparatively rare, if the beds and furniture generally are well looked after. If a stray one makes its appearance, it can often be discovered before it has time to establish a regular colony; and this is the reason why everything ought to be periodically examined, to see if there are any traces of the pests. Hot alum-water is a very good wash for everything that is not textile. Take two pounds of alum, and dissolve it in three or four quarts of boiling water; let it stand on the stove until all the alum is melted; then apply it with a brush while nearly boiling hot to every joint and crevice in closets, bedsteads, shelves, and the like; brush the cracks in the floor and the crevices in the skirting, if you suspect that they harbour vermin, and this is usually a certainty. A strong wash of chloride of lime is also very efficacious in driving this kind of vermin away, and may be applied to the whole floor with benefit in other ways.

Liquid ammonia is a strong remedy, but efficacious. It must not be of the highest strength, such as that used by collectors to kill butterflies, &c.; but the chemist will supply it quite as strong as anyone can comfortably use it, if told what it is wanted for. This should be used from an oil-can, as the spout can be inserted in small crevices.

Sometimes it is necessary to fumigate; but this should not supersede taking all other precautions as above-mentioned, in the way of cleaning and painting bedsteads, filling up cracks and crevices in skirting and boards, &c. Stand an old tea-tray on a couple of bricks. Close the chimney, and hang a blanket over the window and another outside the door, roughly nailing them up, or else paste paper over the cracks and the keyhole. Rake some live coals into an old tin or iron pan, and set it on the old tray, then sprinkle powdered sulphur freely on the coals, hasten out, close the door, drop the blanket, and fasten everything up. Take care not to inhale the sulphur fumes before leaving the room; but there is no need for such violent haste as some have described: there is time enough, but do not linger. Do not go near again till the following day, and ventilate the room before entering by setting the door wide open, or contrive to open the window without inhaling the fumes. Turn all bedding, bedstead, &c., out of doors, if possible, and go on with the ordinary cleaning.

Fleas, though less objectionable than bugs, are very great plagues; but general cleanliness keeps

them away, unless it is a season when they are more plentiful than usual. Fleas are said to swarm in March, and are oftener seen in spring than at any other time, though neither cold nor heat seems to have much effect on them. It is said that scattering a few camomile-flowers between the blankets and between bed and mattress, and so forth, will drive them away. Persian powder is undoubtedly efficacious used freely in the bedding itself; but chloride of lime washing and sulphur fumigation are the best remedies if the apartment itself appear infested.

Moths.—It is a very good plan to wash bedroom floors with plenty of borax in the water, and to sprinkle the boards with powdered alum or borax, which is much disliked by moths. Bedding, curtains, and carpets require as much examining in autumn for moth as they do in spring; and every moth that can possibly be killed on the wing in summer should be thus demolished. These silvery flutterers deposit their eggs in our carpets and curtains; and as soon as they are hatched, the little wriggling maggots eat and roll themselves in the warm woollen tissue.

When they are found in any woollen covering of this kind, saturating the infected places with liquid ammonia is certain death to them, but may injure or take away the colour of the carpet or other article in which they are. Pyrethrum or Persian insect powder also kills them; so does the powder called Bitter Apple. If nothing better is at hand, pepper the places well with black or white pepper.

Prevention, however, is better than cure, and very much so in the case of moths. A lady with a large household went to live in a southern seaside place known by the residents to be much plagued with moths, but no one thought to tell the new-comer. She always had her mattresses well brushed every week, but never dreamed of any further precaution being necessary, and during the second summer of residence in her new home found that seven wool mattresses were literally alive, and beyond all remedy; so she hired a large boat, and sent them out to sea, to be cast into deep water. From that time forward camphor and pyrethrum were her constant friends; and by dint of daily brushing, and sewing up all spare blankets, &c., in linen sheets during the summer, she has steered clear of any similar catastrophe.

The common moth will generally succumb to fumigation of the house with sulphur; but this can seldom be done, except in old and unoccupied houses that are to undergo repairs, as the fumes of the sulphur will bleach or discolour many articles. To rid carpeted floors of moths, after cleaning the room and carpet, treat the cracks and corners of the floor to a thorough wash of corrosive sublimate, cut up fine and dissolved

in spirit. This is a rank poison, deadly alike to persons and insects, but entirely harmless to human beings when not taken inwardly. Some people sprinkle black pepper or fine tobacco-dust over the floor and put down the carpets; but this might be a remedy worse than the disease to others.

Blankets, clothing, furs, silks, &c., to be stored away should first be carefully cleaned and aired, then folded and encased in paper. Before closing the papers, which should be done so securely as to leave no opening through which a moth can find its way, place enough camphor among the folds to give a strong odour, using cakes of camphor, which are sold at the Army and Navy stores. Tobacco may also be used. Large paper bags are convenient for blankets, shawls, &c.

An American lady says: "The only protection against moths that I use is simply to wrap the article (if medium size) in several newspapers, write the name of the article on the outer one (for future convenience), and pack away in a large box lined with tar-paper. The overcoats and heavy dresses I sew up in the winter night-shirts, and hang up on the clothes-wires that you can buy so cheaply, and so keep the coats in nice shape. If the night-shirts do not hold out I sew them in sheets. If care is taken to put them away before the moths get at them, it is effectual, as they never eat through cotton."

Another way for which we can vouch, without even the preliminary combing, is to thoroughly beat the furs with a thin cane and air them for several hours, then carefully comb with a clean comb, wrap them up in newspapers perfectly tight, and put them away in a chest lined with tin or cedar wood, and take them out in the sun at least once a month, thoroughly beating them. The printing ink on the newspapers is just as good as camphor, being very disagreeable to the moth.

Cockroaches.—A house can hardly be called clean while any part of it is infested with insects; and none are more plentiful than cockroaches, which usually, however, confine themselves to the kitchen apartments; but where all are on a floor, or where they are utterly unchecked, invade the hearths of sitting-rooms, and even sometimes find their way upstairs. They are particularly fond of the stores of newspapers that most people put by in summer for the lighting of winter fires. There are several ways of getting rid of them. One way is to mix one ounce of powdered plaster of Paris with two ounces of oatmeal, and scatter it on the floor. This frequently poisons the creatures, though sometimes they seem too wise to eat it.

One of the best remedies for cockroaches is to lay pieces of fresh cucumber-peel in their haunts at night.

In the morning quantities of them will be found dead or stupefied, and a second or third repetition will rid the apartment of even the small white creatures that are the babes of the cockroach race. The best way of getting rid of the carcasses is to burn them when the fire has thoroughly drawn up. This is a safe way of destroying the creatures, as cucumber-peel is not unpleasant to human beings, nor injurious to pet animals.

Cockroaches will crawl up to and drown themselves in a pie-dish or pan of beer with a little sugar in it, if pieces of firewood or any sort of sticks are placed sloping from the floor to the edge of the dish so that they can easily crawl up. Various traps are made on the same principle, and are all more or less efficacious.

Lumps of unslaked lime placed in their haunts will often drive them away, and chemists frequently sell beetle poisons, which are pretty effectual.

Flies.—Flies are very great plagues, especially in autumn, and they do downright mischief by causing spots on picture and other frames that cannot be cleaned as easily as mirrors, which are also their favourite resorts.

Persian insect powder puffed into a room the last thing, after doors and windows are shut, will destroy quantities of flies, which will be swept up with the dust in the morning, and should be burned when the fire is clear.

For rooms but little used, sticky fly-paper, bought at drug stores and placed about the room, will attract and retain the flies. These papers when filled with flies should be burned. To make your own fly-paper, spread treacle on thick brown paper, and then sprinkle fly-powder or poison over it. Place this out of reach of the children and it will do good work. Sweep up and burn dead flies. These papers are unsightly, and so are best put on the top of wardrobes, cupboards, or other out-of-the-way places. So placed they will do much good.

Another device for kitchens, where flies are numerous, is to fill tumblers or jars nearly full of strong soapsuds. For these make covers of paste-board, with a hole a half-inch in diameter in the centre. Around this hole, on the under side, spread treacle or some other fly delicacy. Cover the jar with this, the sweet side down. Three or four of these homely traps will catch a quart or more of flies in a day, and form an excellent supplement to the fly powder. In country kitchens, bushes are often hung to the bacon-rack or to hooks in the ceiling. The flies settle on these at dusk. Before the lights are lit, two persons, standing on chairs, quickly slip a large calico or muslin bag over these bushes, clasping it together at the top. The flies are shaken into

this as the shakers move from bush to bush. When all are gathered scalding water is poured over the bag, and the flies are food to the fish in the nearest stream, or can be burned, or thrown to the fowls, which are fond of them, especially the young chicks, or to the ducks.

Wood ashes should be thrown in drains and other places where flies come from.

Plate and Metals.—House-cleaning would not be complete unless the cook gave her covers an extra clean inside and out. Let her get the finest whitening, which is only sold in large cakes, the small being mixed with sand; mix a little of it, powdered, with the least drop of sweet-oil, and rub it well and wipe clean; dust some dry whitening in a muslin bag over, and rub bright with dry leather.

The insides, which very few cooks condescend to think of, but which are most important, should be scrubbed with soda, sand, and soap.

Plate in these days is usually cleaned with whitening and turpentine, or with rouge, or a patent plate-powder. The patent plate-polishing cloths sold of late years are also very efficacious and innocent; but in many plate-powders there is a mixture of quick-silver, which is very injurious; and, among other disadvantages, it makes silver so brittle, that from a fall it will break. The reason is that the mercury forms an amalgam with the precious metal.

Opinions differ as to the best way of cleaning brass and copper; rotten-stone and oil was the old mixture, and it has lost none of its virtues, but time is everything nowadays, and there is a ready-made amalgam, called Harris's Polishing Paste, which even lazy servants say cleans fashionable brass and copper coal-scuttles and fire-irons by itself, or nearly so. There really is no longer any excuse for having these things grimy, for very little time or labour is required. The paste cleans the brass or lacquered bands and rods for short muslin blinds equally well. Monkey-brand soap is also very good.

Paper and Paste.—If it is not necessary to re-paper a room, small pieces that are soiled can often be covered up, if there be any remnants of paper in the house, as there usually are; or very often the lower end of a width of paper gets loose and comes away from the wall, and gets worse and worse if not pasted down in its place. Some people use gum for such purposes, but it is not so good; and for strength there is nothing like the following mixture of resin and beer with the flour. The mere mixture of raw flour and water, so often used, cannot be relied on, especially in damp weather. To two large spoonfuls of fine flour put as much pounded resin as will lie on a shilling; mix with as much strong beer as will make it of a due consistence, and boil half an hour; let it be cold before it is used.

PLATE, CHINA, GLASS, AND EARTHENWARE.

ONE of the most expensive items in household furnishing used to be the plate, the solid silver spoons and forks that were considered essential, and were much more plentiful in the sixteenth century than they are now. They were carefully treasured, and handed down from father to son; but during the wars between King and Parliament, the partisans of each party continually gave up their silver plate that it might be melted down and sold, in order to provide food and raiment for the army in the field. It took families long to recover from such sacrifices as these, and silver plate has never again become as general as it is known to have been before that period.

England, however, knew repose and prosperity under Queen Anne, William and Mary, and the Georges, and gradually the plenishing of middle-class households began to include spoons and forks again, as well as decanter-stands, silver salt-cellars, and mustard-pots. A silver tea-pot was found in most middle-class families, though trays and silvers were reserved only for the wealthy, and

ordinary folks were content with papier-mâché. Those were the days when the plate-basket was solemnly counted over and carried up into the mistress's bedroom at night, while the earliest errand of the housemaid in the morning, after a preliminary opening of windows, and lighting of fires according to the season, was to that mistress's door for the plate-basket as a preliminary to laying the breakfast-table. The conditions of life have, however, so far changed, and the race of thieves and vagabonds has become so deep and crafty, that few families, except very wealthy ones, with tried and trusty old servants and plenty of them, ever dream of using silver in every-day life; and if they happen to have any, they lock it up carefully, and supply themselves with electro-plate for ordinary service. This, however, applies specially to life in and near large towns, though it holds good also of some country places.

Thieves and Silver.—In all town and suburban neighbourhoods there is a floating population

of ne'er-do-wells, mostly regarded as mere idlers and loafers, but who are really the extremely vigilant spies of the criminal classes. They keep a keen eye on all newcomers, watch for open back-doors and

itself to their experienced eyes as soon as the furniture-vans arrive at the door, and the good-hearted unsuspecting country servant is regarded by them as their lawful prey. They do not covet the tables

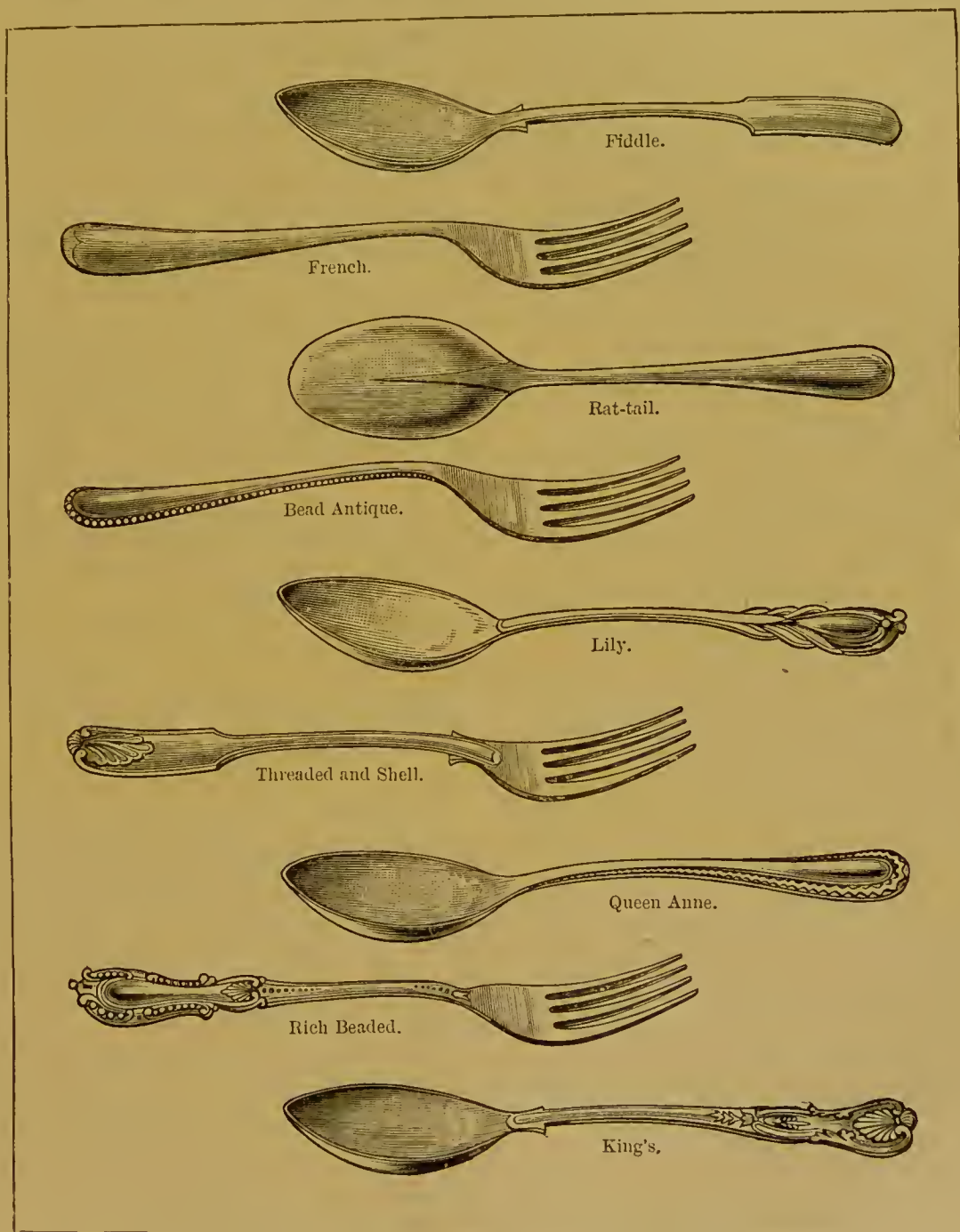


Fig. 1.—STANDARD PATTERNS OF SPOONS AND FORKS.

gates, and if these are vigilantly guarded, introduce themselves to the servants as hawkers, as assistants of any workmen who may be employed, and, though last not least, as possible lovers. The country family drawn to a town by force of circumstances, betrays

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and chairs, nor have they special designs on cold mutton and beer, save as means to an end. What they want to find out, is whether the family owns any silver plate—in other words, anything worth stealing; and if not, that family is tolerably safe

from burglars, area-sneaks, and thieves generally. Of course, the same applies to jewels, and to costly raiment, such as seal-skins and furs; anything that is worth stealing and can be easily passed from hand to hand, or in the case of silver, put into the melting-pot till it becomes unrecognisable. But the owner of so much as a silver teapot, mustard-pot, or a dozen silver teaspoons, if in use, cannot be too keen to keep them in sight, and locked up whenever she goes out of the house. If left all night in the kitchen premises, they are sure to go sooner or later; but, on the other hand, electro may be exposed to ordinary risks with impunity. It is not worth taking—*i.e.*, the risk is so great in proportion to the profit.

Hall-Marks.—All items of real silver are hall-marked, and sold according to weight. The market rate varies, but is generally from 5s. 9d. per ounce duty paid. Everyone should be acquainted with the hall-mark of the country he lives in. Metal articles often have letters and private marks so cleverly disposed as to deceive the unwary with what looks like a hall-mark, but is not. No respectable firm, however, has any desire to impose on its customers in this way, but it is occasionally done privately, and is a mode in which bargain-hunters are often defrauded.

All silver, before it is manufactured into any kind of useful article, must be alloyed with something that will render it harder and more malleable, but less brittle; and the metal most suitable for this purpose is copper, which is invariably employed. But when once an alloy is used it may be overdone, and Government seems at a very early date to have endeavoured to hit upon some mode of assuring the general public of the exact and intrinsic value of all manufactured articles of gold and silver. Traces of this endeavour are found as far back as A.D. 1180, and again in 1260, but in the year 1300 it was made law that a small leopard's head enclosed in a ring should be stamped on all sterling articles of gold and silver. This leopard's head may be seen on the shield of the Goldsmiths' Company of London, which was incorporated by Edward III. in 1327. An ordinary piece of silver plate, whether large or small, has the following marks:—

1. The maker's initials of both Christian and surname, stamped or engraved by himself.
2. The mark of the Company, which in the case of London is the afore-mentioned leopard's head.
3. The Sovereign's mark, the lion *passant*—that is to say, in heraldic language, the lion in the act of walking, with three paws on the ground, the *dexter* fore paw elevated, the face displayed right forward, and the tail displayed over the back.

4. A letter which to the initiated tells the year in which the plate was made.

5. Where articles are chargeable with duty, the Sovereign's head. This last item is important, and there are cases in which its absence absolutely prohibits the bringing of silver plate into the Mother Country except on payment of a heavy duty. Here is an instance:—A clergyman in the West Indies had a complete service of plain but massive silver presented to him. It was not his business to ask exactly whence it came—that is to say, where it was made, and it served his purpose for many years; but when at length he wished to return to England and lay his bones in the Mother Country, he found that not a single item in his plate-chest had ever paid duty, and rather than go to that expense he sold it. The articles had either been manufactured on the Spanish Main, and brought over from there, or more probably had been the property of some old Creole family prior to 1784, the first date to which the imprint of the Sovereign's head has been traced.

Assay Offices out of London.—Goldsmiths' Hall is of course the headquarters of the London Company, but there are other cities which have Companies entitled to test the articles of plate manufactured there and affix their own peculiar mark and date. They do not use the leopard's head, which is the speciality of Goldsmiths' Hall, but put their own mark in its place. They also have their own letters by which experts identify the year in which the plate is made, and the cycle, the numbers of which vary from 20 to 26. These offices are Birmingham, which boasts an anchor as its mark; Chester, which marks its silver plate with the city arms (three garbs and a dagger); Sheffield, which may be known by its crown; Edinburgh by its thistle; Glasgow by the tree, fish, and bell; and Dublin by the crowned harp. There used to be assay offices at York, Norwich, Newcastle-on-Tyne, Bristol, and Exeter, but they are now closed.

Standards.—The recognised legal mixture of silver is 11 oz. 2 dwts. of the pure metal with 18 dwts. of alloy, and these proportions are called *standard*. There is another standard called *Britannia*, from the Britannia mark impressed on it, but it is now very rare, though within the memory of some old people it was common enough. Really old silver is sometimes much sought after, and the possessors of heirlooms have of late years been very proud of them; but it sometimes comes to pass that if those heirlooms are sold they fetch comparatively little on account of the silver being weighted with lead or iron in the hollows. The great authority on old silver plate, with its marks and peculiarities,

and everything of interest pertaining to it, is Mr. Wilfrid Cripps, whose volume on the subject is well known.

Electro-Plate.—The various amalgams or imitations of silver for every-day use have been very much improved within the present century. German silver or pinchbeck looked well when new, but speedily turned yellow, as may be seen in the cases of many old-fashioned watches still in existence. Plating has often been done on a metal resembling copper, and again on iron, and most ugly is the result when the plating wears off ever so slightly. The great thing in this kind of ware is to secure that of a good maker, thickly silvered on a hard white metal, and then it is extremely durable and always looks well. A new and very inexpensive metal is not coated in any way, but has a dark lustre, and if kept clean never changes. It is often called Norwegian silver, but many dealers in it have their own names.

Patterns.—There are certain regulation patterns in forks and spoons, known by their names, and only varying by a few shillings in price, whether in silver or in plated goods. These are the "Fiddle," "French," "Early English," "Threaded," "Queen Anne," "Bead Antique," "Lily," "Threaded and Shell," "King's," and "Beaded;" and as it is well to know what standard patterns can always be procured, Messrs. Elkington and Co. have kindly furnished us with material for the illustrations in Fig. 1, from which their character can be seen at a glance.

People often exhibit with pride their "rat-tail" spoons, and in those of quite modern manufacture this feature is frequently pointed out as a proof of excellence. It was introduced into the make of spoons about the time of the Restoration. Up to that period the bowls of spoons had been round, or nearly so, and the handles cubicular, but they were then changed; the bowls becoming oval, the handles flat and broad at the end, while the bowls were strengthened by a tail or continuation of the handle, technically called a "rat's tail," and usually, though not always, extending to the middle underneath.

Apostle Spoons.—These curious spoons do not exactly date from the year 1500, as they are known to have been in existence before; but from that time till 1650 they were fashionable and general. Godfathers and godmothers gave sets of them, or two or three, or even single spoons, to the children to whom they stood as sponsors, according to their means. The particular saint represented on the handle of the spoon would be him after whom the child, as was usual in those days, was named; or

else the patron or "name" saint of the giver. Genuine old apostle spoons are now scarce, owing to the causes above mentioned. The number in existence is pretty well known to antiquaries, and a complete set would probably realise a thousand guineas at a sale. The emblems to be found on them are as follows, and thereby the apostle represented may be identified:—



Fig. 2.—APOSTLE SPOONS.

St. James the Less	-	A fuller's bat.
St. Peter	-	A key.
St. James the Greater	-	A pilgrim's staff and gourd, bottle or scrip; sometimes a hat with scallop-shell.
St. Paul	-	One or two swords.
St. Thomas	-	A spear; sometimes a builder's rule.
St. Matthias	-	An axe, or halberd.
St. Andrew	-	A saltire cross.
St. Simon Zelotes	-	A long saw.
St. Matthew	-	A wallet; sometimes an axe and spear.
St. John	-	A cup (the cup of sorrow).
The Saviour, or Master	-	An orb and cross.
St. Philip	-	A long staff, a double cross, or small cross, or basket of fish.
St. Jude	-	A cross, club, or carpenter's square.
St. Bartholomew	-	A butcher's knife.

With the fancy for reviving all sorts of antiques, apostle spoons have come in again, and some are to be obtained very cheap. Of course the handles of such are cast, and often very roughly cast, and consequently very brittle. The figures on modern spoons are usually more or less rough copies from the twelve figures in the shrine of St. Sebaldus at Nuremberg, which were carved by Peter Viseher and his five sons, the work taking them eleven years to

complete. The figure of each apostle in the shrine is 1 foot 9 inches in height. Other spoons are wrought and chased, and of course far more expensive. These modern apostle spoons are also made in all sizes and qualities of electro-plate, gilt and ungilt. Two are frequently given in a case for helping dried fruits, the prices of each spoon varying from 30s. to £3. They are also made in dozen sets of tea and coffee spoons, and are frequently advertised at from 15s. to 25s. a dozen, sometimes with a pair of sugar-tongs in addition, and all in a velvet-lined case. Fig. 2 represents an antique spoon of a form that is frequently copied in these modern replicas.

Plated Knives and Forks.—Those who have not all the adjuncts of the table in silver—and very few have—find that even to have them in good plated ware runs into a considerable amount of money. The items desirable in families moving in society are dessert-knives and forks, fish-eaters, and fish-carvers. These are made in a large variety of really elegant patterns, and it may safely be affirmed that the lowest prices at which they may be bought of serviceable quality are from 5 guineas to £7 15s. per dozen dessert-knives and forks, £6 per dozen pairs of fish-eaters, and £1 for a pair of fish-carvers. A butter-knife is a thing frequently given as a present of solid silver; but the purchaser, either of that or of electro-plate, will be wise to choose one that is made in a single piece throughout, rather than a blade inserted into any kind of handle. Nut-crackers, sugar-tongs, sauce and soup ladles, are also wanted; and though sauce-ladles are continually made of earthenware, they are more apt to break than almost any other article, and it is true economy in the long run to have silver or plated ones.

Tea and Coffee Services.—Many who possess no other item in solid silver have a silver tea-pot, in the shape of a present or heirloom. The majority of silver tea-pots have the same fault—a long, plain, slanting spout coming from the bottom of the vessel, which makes it almost impossible to pour the tea out of them without a certain amount of “sloppiness.” The ordinary articles comprised in a tea and coffee service are tea-pot, coffee-pot, sugar-basin, and cream-ewer; and a good electro-plated set costs from £10 to £12. Of course they can be had at very much lower prices, but speedily tarnish, and the thin coating of silver wears off. The fact that silvered ware is much less easily broken than glass or china, has led to things of this kind being usually invested in by lodging-house keepers, and so forth: and unless they can be had of extremely good quality, and kept exquisitely clean and bright, it is better taste only to have a

metal coffee-pot and tea-pot, and to choose a sugar-basin and cream and milk jugs in glass.

Salvers and Trays.—It may be safely said that very well-silvered salvers, eight inches in diameter, are to be obtained from 20s., and as good a tray, for half a dozen or more cups, and the other paraphernalia of tea or coffee, as most middle-class folks require, for £8, or perhaps the same number of guineas. Nothing injures these trays and salvers more than having liquids spilled on them; the bottom of a wet jug or glass always leaves its mark, and every time they are brushed and cleaned some infinitesimal portion of silver is worn off, hastening the time when they must be re-silvered—an operation that is only worth while in the case of large articles of this kind, for it costs as much to re-silver forks and spoons as to buy them new. A silvered salver, or more than one, is, however, no longer the *sine quâ non* that it used to be of the middle-class housekeeper who aspired to have everything nice; for the Japanese lacquer trays, with their stand-up edges that prevent glasses, &c., from slipping off, are now very much used, as are also the pretty olive-wood trays, and the brass ones from Benares, that are so easily cleaned and look quite handsome, at the cost of about 10s. each. The introduction of these has also to a great extent banished *papier-mâché*.

Cruet-Stands.—These are very much less in use than formerly, when a good cruet-stand with six or eight bottles was the recognised central ornament of the dinner-table. It is now very generally superseded by a pot-plant or vase of flowers, and the pepper-casters, mustard-pots, &c., are placed in convenient situations round the table. Perhaps this arises less from change of fashion than from the lamentable fact that a great many people are at meal-times so much absorbed by their own thoughts or by conversation that they neglect to pass the condiments to their neighbours. It has been related of Feechter, the “ideal lover” of the stage, who was also quite a famous cook, celebrated for his little dinners, that he so much disliked anyone to be without the little ceteras of a meal, and equally so disliked the talk of clever people being interrupted, that he always had as many salt-cellar and small cruet-stands as he had guests, which contained not only mustard and pepper, but oil, vinegar, and sauces, so that everyone could season his viands to his liking. Small breakfast cruet, comprising salt, pepper, and mustard, are very useful. Electro-plated salt-cellar gilt-lined suffer much from the action of the salt on them, and speedily turn black. Neither silver nor plated spoons will bear being left in the salt, but ought always to be balanced over the top

of the salt-cellar, and removed when not in active use. The same applies to mustard-spoons, which tarnish very badly if not taken out of the mustard, washed, and kept in the plate-basket between meals; and mere washing will not suffice for egg-spoons, which must be well rubbed with dry salt after a first washing, and before a second one, or they will tell tales of neglect.

Preservation of Silver Knives and Forks.

—Dessert-knives and forks and fish-eaters must be subject to the same rule as cutlery if they are to remain in good order. When washed, only the blades should be put in hot water, for a single plunge of the whole article into the washing-up tub is sufficient to loosen the cement that fastens the blade into the

tight receptacle, such as a tin box or canister. Nice serviceable plated jars or boxes may be bought from about 15s.; but whether entirely of metal, or of glass or china, with plated lid and stand, the great thing is to see that the lid fits closely.

Cleaning Plate.—The subject of plate cannot be dismissed without a few words on cleaning it. There is nothing to beat the old-fashioned non-mercurial rouge powder, provided it is well brushed and rubbed off. Whitening, moistened with turpentine, is very effectual, and is to be found in most house-

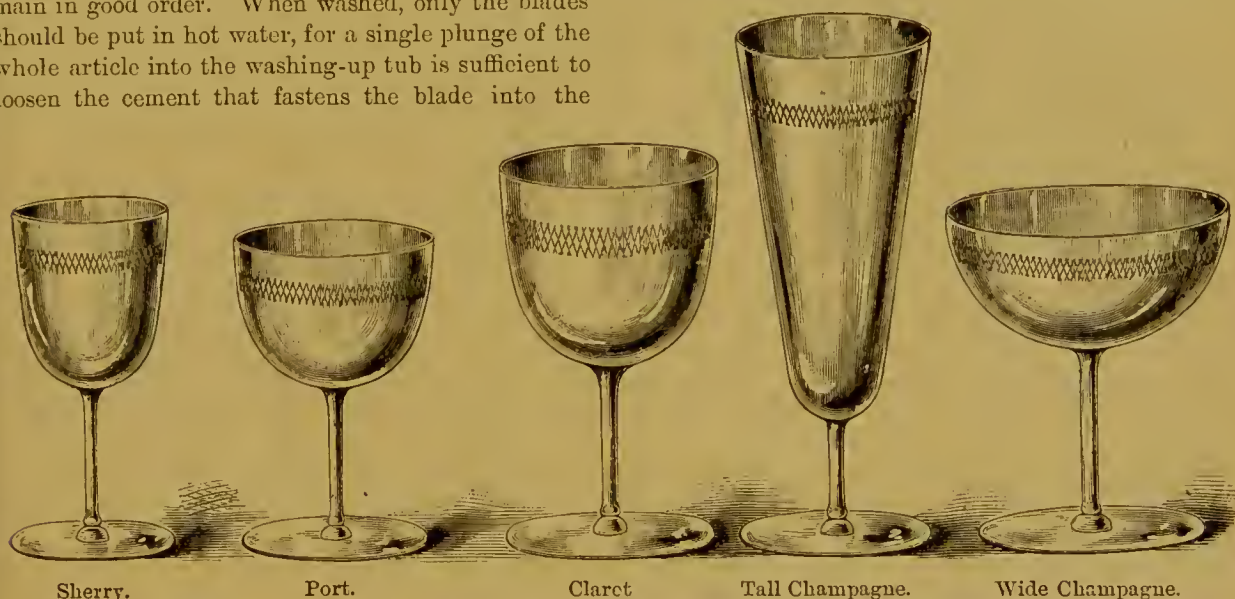


Fig. 3.—PRINCIPAL SHAPES OF WINE-GLASSES.

handle, with the result that they speedily come apart. A jug is really the best thing to wash them in, but it must not be deep enough for the water to reach above the blades.

Cake-Baskets.—A cake-basket is rarely seen now, perhaps because glass and china plates are so pretty and comparatively cheap. Still, it is a mere matter of fancy, and anyone who has a cake-basket is far wiser to keep it in use than to put it away. Servants in cleaning a basket of this kind are, however, very apt to do it so vigorously as to bend the article out of shape, so that it will not stand straight, and is consequently a source of annoyance to the owner. The great point is to turn the cake out every day, wipe the basket, and put the cake-cloth straight, or substitute a clean one. Cake-crumbs, on account of the grease in them, turn the metal green, and have a peculiarly nasty smell and taste.

Biscuit-Boxes.—The secret of keeping biscuits crisp and fresh is to have them in a perfectly air-

holds, even if plate-powder be absent. The smell of the turpentine takes a little time to evaporate, and it is desirable that the plate should be cleaned at least an hour before it is put on the table. Many plate-powders contain mercury, which is destruction to any kind of electro-plate, and this is the reason why so many prefer the innocent whitening. It is very important that the chamois leather used for plate should be kept dry, but there are cloths made in these days that answer the same purpose, and are called Chamoisine (Hothersall's patent). American house-keepers, however, declare that there is nothing like old newspapers for imparting the final polish to glass or plate, stored in a dry place, and well crumpled up between the hands before being used.

Moulded Glass.—Glass, as everyone knows, is of many kinds—English and foreign—and it would often take an expert to distinguish one from the other. Pouring molten glass into moulds produces dishes, plates, jugs, and innumerable other articles for household use at a remarkably cheap

rate; and so long as the shapes are good, they really are something to be thankful for. The humblest people can have a glass sugar-basin or butter-plate for a very few pence, and those who have an eye for the small niceties of life avail themselves of them. The commonest moulded glass is easily washed and made clean and bright; and though the same is true of any kind of earthenware, yet it never looks quite so clear and clean as glass, supposing that the glass is properly cared for; and it is just as easy to wash it in soda-and-water, rinse it, and wipe quite dry, as to wash it in any less thorough manner. Most people, unless they are very wealthy indeed, have moulded glass dishes of various sizes and shapes for jams, sweets, jellies, blanc-manges, fruits, and edibles of the dry pastry kind.

Moulded dishes look particularly well, and this is partly owing to the fact that all the indentations are underneath, the visible upper surface of the glass being smooth, and, as it were, veiling the roughness inseparable from moulding. Nice little round or oval dishes, for butter, jam, or sweetmeats, are now as low as 6d. each, and larger dishes go according to size: an oval one, quite large enough for a quart mould of jelly or blanc-mange, costing about 1s. 6d., while really handsome and elaborate round dishes for trifle or tippy-cake are rarely more than 3s. 6d. each. Small moulded tumblers, quite large enough for the juveniles in the nursery to handle, are to be had for 1d. and 2d. apiece. These latter are also in demand for putting in the hollows of circular toilet cushions, where, with a few flowers in them, they give a refined, cared-for look to a room, and especially smile a welcome to a guest. A shilling is a very frequent price for a small shallow moulded dish often used for butter, especially when it is made up in little balls and rolls.

Cut Glass.—Cut glass is rather expensive, every facet having to be separately cut on the surface of a very clear thick glass. It is essentially hand-work, and cannot be produced or imitated in any other way; and after being cut, it has to be polished with equal care. Brilliancy also requires glass of highly refractive power, which is in itself more expensive. The beauty of cut glass is altogether destroyed unless dirt is kept resolutely out of its elefts. There is a great difference in quality between the most brilliant real English flint, and the inferior bluish glass of German manufacture.

Engraved Glass.—Engraving on glass is a work of skill, and takes a considerable amount of time and dexterity. It is never attempted on glass of inferior quality, and is frequently combined with cutting. The worst of a service of engraved glass,

of any special pattern, is that when anything is broken it cannot be matched, but must be made on purpose, and this is decidedly expensive. But while wine-glasses, engraved with what appears a simple key or Grecian pattern, cost from 1s. 3d. to 1s. 6d. each, they can be had of German manufacture, engraved by a quick and ingenious process in a band of interlacing lines, as low as 6d. each. These are not quite always procurable, and are no doubt often passed off as English engraved glass, but "when found" they are worth making "a note of," and save much outlay of coin, while producing quite as nice an effect on the table. The costliness of glass never diminishes the risk of breakage, a fact that leads many housekeepers to have at least two sets—one for ordinary use, and the other for special occasions.

Frosted and other Decorative Glass.—Frosted glass, which looks as if it is covered with crystals, is very much used for water-pitchers or jugs for the table, and each of these is frequently—one might almost say, usually—accompanied by a couple of tall drinking-glasses to match. They are expensive, for even a pint-and-a-half pitcher of this glass costs 5s. 6d., but they are mostly made in very elegant shapes, and are extremely ornamental. Ground glass is sometimes used, but it is apt to get discoloured, and no amount of washing will prevent it. This kind of semi-opaque glass is less expensive than the frosted.

There are many other kinds of fancy glass ware, many of which, however, are less fashionable than they were at one time. Glass articles of all sorts are to be found of iridescent, wrinkled, milky, waved, and other kinds, and of all sorts of colours, some of which are very curiously varied in different ways. Almost every year brings out novelties, the Birmingham manufacturers vieing with Continental factories in producing novel ideas or designs.

Coloured Glass.—The pale blue tumblers and jugs that have added a tinge of colour to the tables of water-drinkers (that is to say, of total abstainers) have fallen a little into disfavour. Some wag made cutting speeches about how cold they looked, and how invariably they gave him "the blues;" and, strange to say, it was the signal for their disappearance. They were very cheap, or, at all events, there were cheap ones to be had at 1s. each: but unless absolutely scrubbed every day with tea-leaves, potato-scrappings, or some other infallible recipe for clearing glass, every drop of water showed itself on them like a drop of liquid dust, so it was no wonder that in busy households they were discarded. Some yellow glasses had the same disagreeable peculiarity, but

that colour was never so much used as the blue. The greens and oranges are now more common, made in all kinds of quaint shapes and patterns of jugs and ewers, and some of these are very attractive. Coloured "crinkle" ware requires, perhaps, as little trouble as any kind to keep clean.

Tumblers.—The origin of tumblers is well known. They were glasses made to contain a single draught that could be drunk off at once, for if the vessels were put down with anything in them the contents must needs be spilled, because the round-bottomed "tumblers" could not stand alone. Common moulded tumblers are very cheap indeed, 3d. or 4d. purchasing them of quite good enough quality for nursery and kitchen use. Quite plain thin glass tumblers, somewhat tall and narrow, are much liked; but they require the utmost care in wiping, or they break. Most people endeavour to put in the whole hand, and the majority of hands are too big. The only way is to rinse such glasses thoroughly in hot and cold water, give them plenty of time to drain, and then polish the outside with dry cloth or leather. Small thin clear-glass tumblers have long been used for Burgundy and claret: pale green ones have been reserved for German wines; ruby have served the same purpose; and the latest craze is for "poppy" red, a pale shade of the colour which resembles that of fine old tawny port more than anything else. For ordinary use as tumblers proper, nothing will ever be so popular as the plain and fairly substantial glass, with the cut facets reaching about half-way up, at from 8d. to 1s. each. One of the great recommendations of the plain thin glass is that every description of drinking-glass is made in it *en suite*, and, consequently, there is no difficulty about matching; but the wine-glass stems are still more prone to snap than the tumblers are to get broken. Plain thin tumblers of the useful unbreakable glass are also much used.

Wine-Glasses.—These are ordinarily divided into port, sherry, hock, and champagne glasses. The customary shapes of these are represented in Fig. 3. For port-wine the bowls are short and somewhat globular; for sherry they are longer and narrower, and the average price for plain ones of both kinds is 6d. each. Hock-glasses have altogether larger bowls, and are usually green, or ruby, or the new and costly "poppy" red, with or without clear-glass stems; but clear engraved glass may also be seen. Claret is drunk out of similar glasses, or much larger ones of somewhat similar shape, or out of small smooth tumblers.

Champagne-glasses at about 10d. each have for years been made with large shallow bowls and

hollow stems, which prolonged the effervescence of the wine; but now small tumblers, 3d. to 4d. each, and long narrow glasses, very much like specimen-glasses, at similar prices, are quite as general. The cost of cut and engraved glasses of each sort is entirely according to elaborateness of design and workmanship.

There is an important point about glass. The frugal housekeeper with young children and raw servants about her, may have to put up with thick ware for ordinary use; but for the fastidious or delicate appetite it should be *thin*. This applies especially to wine—a glass of claret is as different as possible taken from a thin or a thick glass; but it is much the same with a glass of good ale from a thin tumbler, or with a glass of lemonade, or even the sparkling ale of old Father Adam. As remarked further on, it is the same with tea as regards thin and thick cups; and it seems as if a thin edge of the vessel acted in some pleasurable way upon the nerves of the lips—not the case with a thick and massive edge.

Decanters.—Decanters are usually of two sizes—pint and quart. They may be of almost any shape, but for many years a graceful and classic form, globular and long-necked, has held its own. It is a question of taste and expense whether these decanters are of cut, plain, or engraved glass, all kinds being available. Very nice full-sized ones cost from 10s. 6d. to 15s. each. Very handsome massive old cut-glass decanters may often be picked up at sales, especially odd ones. Claret-jugs may either match, as in Fig. 4, costing about 16s. each, or be of entirely different pattern, and they are sometimes mounted with silver or electro-plate. On the whole, plain thin glass, with a little engraving if no crest is used, and claret-jug and decanter matching, as in Fig. 4, looks perhaps most chaste and elegant on a table. Spirit decanters are usually made with handles, after the shape of the German bottles that contain Steinwein, which are often used for spirits, with a small metal label engraved with "Brandy," "Gin," "Whisky," &c., hung with chains round the neck, so as to show which is which. Very frequently they are of different colours, such as white, green, and ruby, the usual price being 2s. 6d. each.

Liqueur-stands of the "Tantalus" description are much used, and are extremely ornamental, while perfectly secure so long as the owner keeps the key. Three plain half-cut or full-cut bottles stand in an oblong tray that fits into a frame, to which is attached a handle, so as to be easily lifted from place to place. Sometimes the keyhole is in the centre of the frame, sometimes on one side. Unlocking just releases the stoppers from the pressure

of the frame and allows a bottle to be taken out, and the cork closes again with a spring. Very nice oak ones with plated handle and lock cost about three guineas, and they run as high as £8 10s.

Small decanters or *carafes* used to be placed at each corner of a dinner-table, though jugs are now more frequent. Water-bottles and glasses for toilet purposes are of the *carafe* kind, and very nice ones are to be bought almost everywhere at from 1s. to 1s. 6d. the set.

Finger-Glasses.—These used frequently to be of clear green or ruby glass, principally because it made a pretty colour on the table; but with the use of a distinct hue of this kind, the choice of dessert services was limited to green, white, or amber, unless anyone was so fortunate as to possess one of cream Wedgwood. White clear glass at from 1s. apiece, or to match the wine and other glasses, was speedily found more useful; and though now often made in two colours to match, it is still more fashionable to have clear glasses that are “distinctly precious” in themselves, such as the exquisite Venetian or Salviati, about 6s. 6d. each, or perhaps Hungarian or Bohemian, both of which have been largely imported into England of late years, and are marvelously cheap, beautiful little bowls being procurable at 2s. 6d. each. They are to be found, however, less in glass-shops proper than in those of fancy stationers. Before quitting the subject of finger-glasses, we must just say how greatly it adds to the charm of them if a little well-distilled rose-water is added to the ordinary water, or if a tiny bunch of fragrant flowers floats on the surface of each. This is an Indian custom, and the idea is that everyone just touches the mouth with the wet flowers, and then wipes it dry with the serviette or dinner-napkin, which is retained throughout dessert. The most suitable flowers in our climate are heliotrope, oleander, or carnations, tied up with a spray or two of lemon-scented verberna or scented geranium. Very lovely tinted and fanciful finger-glasses are made at Stourport, and at fancy prices.

China.—The days are past when tea was ordinarily poured into the fine old Worcester or

Derby cups without handles, which puzzled the unwary guest, whose mind was divided between the desirability of raising the cup to the mouth, and the danger of finding it so hot that it might very likely be dropped, and thus a valuable tea-service spoiled. It was a very real dilemma, well within the memory of people old enough to be grandparents; but now it has vanished, because the handleless cups are the cherished ornaments of cabinet or *étagère*, and no one any longer dreams of using them. Still, accidents were not so common in olden days as might have been imagined, since a very little practice rendered one expert in handling a very hot cup with impunity.

Best china, commonly esteemed according to its transparency, is still continually handed down from grandmother or mother to daughter; and even when not of any celebrated make or pattern, it is generally very delicate and pretty. Most of our finest china is made in and near Worcester, and it is cheaper in the West of England than in London.

In buying a tea and coffee service there are several points to be studied, such as whether the coffee-cups have saucers, or whether one dozen saucers are supposed to be equal to the demands of twenty-four cups—twelve

tea and twelve coffee. An ordinary “short” service has two cake or bread-and-butter plates, and no small plates at all. Small plates, though not wanted for afternoon tea, really are necessary for a regular family meal; and it is very ugly to see a table set with, say, green cups and saucers and white plates. The wisest plan in making a first purchase of choice china for a best service is to fix on a colour and have it all complete—a regular large set. Unless almost miraculously preserved, it will gradually get broken up in course of time, and then a *small* service of the same colour will supplement it without looking patchy, and only those who are most intimately acquainted with it will notice that there is a slight difference of shape or pattern.

The patterns of tea-cups, and in a less degree of breakfast-cups, are many and various. Formerly one shape or other would be the fashion for a time, but both the modern idea of individuality, and the movement towards revival of old fashions, have

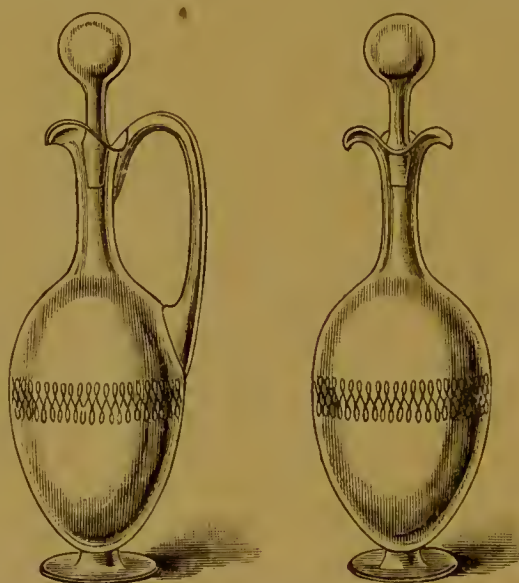


Fig. 4.—MODERN JUG AND DECANTER.

pretty much done away with this of late years, and no good set of any shape would now be thought at all out of the way, in a house of no matter what pretensions. In Fig. 5 we represent some of the principal shapes which have been in favour during the last thirty years, and almost any one of which, with various modifications, may be obtained now. The only pattern to which real objection may perhaps be made is the very tall cup with narrow base, which came in somewhere about 1866, but went out again rather speedily on account of its great instability if the saucer was held in the least degree

Harlequin cups and saucers—that is to say, each of a different plain colour—are often used for five o'clock tea, though they are just a little *passé*. There are also families where each individual has a special cup and saucer, especially for breakfast. These may be had from 1s. 6d. each.

Cups and saucers made so that the cup fits into a little well in the saucer, and consequently does not shift about, are very convenient for invalids and nervous persons, and cost from 2s. 6d. to 4s. each. “Moustache cups” for gentlemen may usually be obtained to match sets, or in white with just a rim



Fig. 5.—VARIOUS SHAPES OF TEA-CUPS.

removed from the horizontal position. That is a serious fault in it, but none would be found on the score of fashion or good taste.

The essential value of china, so far as its raw material is concerned, depends upon its *transparency* and its *thinness*. The latter point is not only of æsthetic value. No one would imagine without direct experiment—an experiment which is well worth making by any lady—how differently a cup of fragrant tea or coffee, with genuine cream, tastes from a *very thin* and from a *thick* cup. Let the beverage be precisely the same, nevertheless the difference is magical.

A pretty small or “short” service will cost from £2 to £5, and a full large one in proportion, always supposing that the china is thin and transparent enough to merit the name of porcelain. The amount of gilding also has a great influence on price, and so has the character of the decoration. Flowers or little landscapes painted by hand must be paid for, and so must medallions, which have been fashionable of late. Cups and saucers of a single plain tint, with a border at the edge, are always in good taste; and as for shapes, they vary as above noticed. Deep and narrow, fluted and plain, wide and shallow—all have had their day; and as good china is far too valuable to be lightly discarded, all these forms are in fashion at the present time.

and neat pattern of a leading colour. These run from 1s. 3d. to 4s. 6d., with saucer to match.

Very pretty and inexpensive china is now made in white with just a rim of colour, and very often a printed pattern that looks like gold, if on close examination it turns out only to be a cleverly chosen shade of brown. Both tea and breakfast cups and saucers are alike in everything but size, and the small plates are not so very small, but answer the purposes of both breakfast and tea. They can be very easily matched, as the pattern is kept going at whatever manufactory they issue from, for many years at a time. A combined tea and breakfast set of this kind is economical and most useful.

Among the revivals of these latter days the old blue willow pattern has sprung once more into favour, both in sapphire and turquoise blue, and in a kind of stone-china is often used for tea and breakfast services. A tea-set of twelve cups and saucers, twelve small plates, one or two bread-and-butter plates, slop-basin, &c., may be had of this kind for half a guinea. There is something of the modern-antique style about this pattern and the shapes in which it is made.

Stoneware.—Technically speaking, stoneware is hard pottery glazed with fused salt, and it is largely

made in Staffordshire. A great deal is imported from Germany, and very cheap it is, especially a cream-colour or buff with gold rims. The price usually runs from 4d. to 1s. per large cup and saucer. Most dinner services are made of English stoneware, with more or less elaborate ornamentation, and it is admirable for dessert services. We have known such a service in constant use for at least five-and-twenty years, and though a dish was broken by accident and another defaced, the colours (pink and amber) remained steadfast, the gilding was only worn off here and there, and chips were only remarkable by their absence.

Dinner Services.—It is very wise in purchasing a dinner service to choose one that can always be either matched or made, and there are some very handsome old Derby-like patterns that can be so had. It is a great benefit to have a white centre to a dinner-plate; food always looks daintier and more appetising on it. More plates are always wanted than would at first sight be supposed, in case of fish and entrées besides a joint composing the dinner, as well as several kinds of sweets. A smaller number of soup-plates will suffice—say, a dozen—because soup-plates cannot be used for anything else; but of pudding and meat plates, there should always be two or three dozen of each size, and at least a dozen cheese-plates, in houses where people “dine.” A soup-tureen, four vegetable-dishes, two or more sauce-tureens, and about eight dishes of various sizes, including a well-dish for a large joint, go to make up a complete dinner service.

For ordinary use by plain people, a very good printed stoneware service, comprising four dozen plates (soup, sweet, pudding, and cheese), two vegetable-dishes, two sauce-tureens, soup-tureen, and six meat-dishes, can be bought for thirty shillings.

Present fashion is for a dinner service all white, with the single exception of the owner's crest or monogram in gold or one distinct colour, and perhaps a thin line round the rim. These can be had complete for twelve persons—that is to say, consisting of one hundred pieces—for £3 13s. 6d., or with the crest or monogram in a colour for four guineas. Gold costs a little more. Plain lined services cost from 1s. 8d. to 4s. per dozen plates.

Well-dishes are expensive items, as people discover when they break one belonging to a set, and have to pay from 6s. to 18s. 6d. and upwards for having another made to match. They are also made in plain white or lined earthenware, which does not quarrel with anything else on the table, at moderate prices, according to size, from 4s. 6d. to 8s. Extra sauce-tureens are very useful, as, for instance, when gravy-and-bread sauce, apple sauce, and melted butter are

all wanted. They vary from 1s. 6d. to 4s. 6d. each, according to pattern. The shape with one handle is called a boat; most of the modern ones have two handles, and the shapes are legion.

With some large dinner services half a dozen pie-dishes are often sold of the same pattern; but unless very carefully used, and never put into *too* hot an oven, they speedily discolour, chip, and crack, causing great annoyance to whoever has paid for them.

Drainers ought to form component parts of all vegetable-dishes, but it is seldom that they do. White earthenware drainers, which cost from 8d. to 1s. each, are sold by all good china shops, and are made round, oval, and oblong, to suit the different shapes of vegetable-dishes. The use of a drainer obviates much annoyance at the dinner-table, for even a careful cook does not always strain greens, spinach, or French beans sufficiently, and a visible residue of discoloured water is anything but appetising. Boiled fish ought always to be served on a drainer covered with a napkin and laid in the dish. These oval drainers are large and rather expensive, not less than from 2s. 6d. to 3s. each. They are great comforts and conveniences; but the economical often turn a smaller dish upside down with a napkin over it, so as to have an inverted dish to lay the fish on.

Every housekeeper ought to supplement the dinner service by something quite distinctive for kitchen use. The ordinary willow-pattern earthenware is very cheap, and answers its purpose quite well; but it is possible to overlook dust and dirt on a surface printed all over with a pattern, and therefore plain thick white ware is still better. These things are not merely for the servants' table, but for every description of food that is put away. The half-eaten joint, the few cutlets or pieces of fish that are left, should always be placed on a clean plate or dish before being removed to the larder. Small willow-pattern plates begin at 1d. each, and the prices of larger ones and dishes is merely a question of size.

An American fashion that seems to be creeping over here is to have a different set of plates and dishes for different courses. For instance, a pretty service for fish is painted with seaweed and coral, and the dishes are fish-shaped. For oysters the plates are often magnified scallop-shells of glass. Plates for the ices that almost always wind up an American dinner, are usually white or coloured glass. All sorts of oddities seem admissible; a lady buys a few plates wherever they take her fancy, and contrives to utilise them at table.

Twin Dishes.—Very useful and handy, especially where one servant has to wait on a good many people at table, is a vegetable-dish with two or more

divisions, in each of which is placed a different kind of vegetable. These are not usually made to match dinner services; but can be had in white china at 5s. and 6s. each, or in white and gold for 8s. and 9s., according to size. Twin sauce-tureens, which save a great deal of time and trouble, are also to be had at from 3s. 6d. to 9s. 6d. each. A very pretty china plate with three divisions, and a handle at the junction, is also convenient for handing cheese, butter, and biscuits together. These usually cost about 3s. 6d. each, but much higher-priced ones are obtainable. They are also made in electro.

Hot-Water Plates and Dishes.—Venison, like mutton, is a meat that speedily gets cold, and ought always to be served on a hot-water dish. These are often made in plated goods; but in earthenware, with a fixed pan, they cost from 10s. 6d. to £1, according to size. Small soup-tureens are also made on the same principle; and so are dishes for hot cutlets, or bacon and eggs. Hot-water plates with covers are made in many patterns—indeed, any plate may be fixed on the part that holds the water. In plain white or ivory ware they cost from 2s. 3d. to 2s. 9d. each.

Very nice dishes with covers, that take a wedge-shaped piece of cheese and keep it from getting dry, are very ornamental, but usually of a different pattern from the dinner service. Very pretty ones cost about 3s. 6d.

Dessert Services.—The variety of these is very great indeed, as may be observed by making a tour round the showrooms of such firms as Mortlock, Osler, or Phillips. Gilt and coloured borders, wreaths of flowers, medallions, and painted flowers and landscapes, all have their votaries, but just now the favourite fashion is to have both plates and dishes of pure white, cream, or ivory, the idea being that there is thus no prominent colour that can possibly clash with the tints of the flowers on the table. The borders of the plates are very often open-work in imitation of wicker, and the dishes are low, unobtrusive, and not very large. Sometimes they are in the form of baskets, and to many people's minds these suggest the idea of a little fruit being made the most of. They are often constructed in two tiers, the lower one of which is planted with small ferns and mosses, while the fruit is in the upper part. This looks very pretty for such fruits as cherries and strawberries, but is scarcely practicable for anything larger. These white trellis-work plates and dishes of pretty fanciful design are now imported from abroad, and may be bought very cheap indeed at shops where all kinds of trifles and bits of art-pottery are sold. They are not intrinsically good,

but are very taking. At shops of this kind there are now being sold whole dessert services in dark tones of green and brown and red clays, like some of the art flower-pots, in very quaint shapes, at 18s. and £1 the set. Beautiful dessert services are made of the Burmese china, that shades from salmon-pink to pale yellow, and some very lovely ones have been made entirely of cut and engraved glass. One of the very last novelties was in the shape of cameos on crystal.

Very famous many years ago were the dessert services in the ware known as cream Wedgwood, which was one of the great Josiah's early triumphs, and the one which procured him the appointment of Queen's Potter after he had diplomatically presented Queen Charlotte with a caudle service of it when her eldest son was born. The plates were most frequently modelled very carefully in the semblance of a vine-leaf. At a sale in North London some years ago, before everybody knew so much about art, a lady bought for a few shillings a dessert service of this cream Wedgwood, with only one or two pieces missing. It was used regularly for many years before she became aware of its value, and then gave it to her daughter as a wedding-present. Not very long ago we heard of a will being proved, and the people who had been through the house to see what sum the probate duty must be fixed at, asked to see the mistress when their task was over, and inquired whether she was aware that the dessert service she had in common use was almost priceless old Worcester. "The most valuable thing you have in the house, madam," said the grey-haired, dry-as-dust-looking commissioner, with unwonted brightness in his usually dull eyes. She had not a notion previously that it was worth more than two or three pounds.

A generation or so ago there was one kind of dessert service, and one only, in use among middle-class people, and that was a highly glazed dark green. The pattern was as if several vine-leaves had been taken and laid one over the other to form a plate or dish, and relieved here and there with a tendril or a bit of stalk. Fruit looked lovely in them, but they became more and more scarce, and gradually disappeared. Within the last few years modern imitations of them have sprung up, but they can hardly be called common.

Toilet Ware.—Nothing has improved more of late than toilet ware, and in proportion as it has become prettier it has increased in size and capacity, much at the same rate as washing apparatus becomes larger by rapid degrees, as one journeys from southern Europe to the British shores. The washing-basins of our youth were very small, and some of the silver

basins and owers preserved as heirlooms in old English country houses are just about that same size. The modern basins and jugs made at Burslem and Stoke-upon-Trent are almost large enough for babies' baths, and contain an amount of water that is luxuriously delightful. The favourite colours seem to be pink and cream, and a bluish-black or brown pattern on a cream ground. Most of the sets are furnished with sponge-basins and drainers to match, in addition to the ordinary soap and brush dishes, and the price of a double set is from 20s. to £5 or more. Small basins and jugs, very suitable for children's use, are made in printed earthenware, each set complete with chamber, open soap-dish, and brush-dish; they cost 3s. 9d. each at most furnishing houses. Very pretty and inexpensive sets are also made of a pretty blue that recalls old Nankin, and the receptacles for tooth-brushes are small upright jars. These are from 8s. 6d. per set. It is a comparatively modern discovery that wet brushes are better left uncovered, and these jars are the outcome of it. Hot-water cans are also made of cream and printed ware, principally at Coalport; they are rather expensive, about 6s. 6d. each, but very nice indeed.

Toilet-Pails.—It is to be hoped that the painted tin pail which required such anxious care in keeping it clean, and which a single day's neglect or wrong usage caused to smell disagreeably, has been well-nigh improved out of existence by the introduction of earthenware pails or jars made after the similitude of a bucket with a perforated lid and a strong cane handle. Long after they first appeared, they were expensive and very difficult to procure, but now they are to be had everywhere at about 4s. 6d. each. It is said that the majority are imported from Germany, but it is to be hoped that this is a libel.

Earthen Pans and House-Ware.—The crockery of a household cannot be considered complete without red earthen crocks with lids, for keeping bread and cheese in respectively. Bread is kept moist and fresh in such receptacles as these, and one capacious enough for a family of moderate size costs 3s. to 5s. Smaller ones of course suffice for cheese, and the shilling size is a very good one. These crocks, without lids, and of various sizes, are most useful in a house; they are the proper things to make bread in, and are very useful for any washing that may be done at home in a small way, and for starching. Most housewives have a small earthen crock, with white or yellow lining, to make pastry in; and in the North of England square, heavy, open dishes are made with a greyish lining, and it is commonly said that a milk-pudding is never so sweet as

when made in one of them. The prices are about 6d., 8d., and 10d. Round yellow dishes are much esteemed in some parts, and used for the same purpose. Iron pie-dishes, enamelled white inside, have come a good deal into use because they are not easily broken; and they are very nice so long as they are not burnt. Meat and fruit pies do very well in them, but they are not often liked for milk-puddings. The sizes begin at about 6d. each, and mount upwards in price with the increase of dimensions.

There is nothing more unpleasant than to have hot water sent up in milky jugs, or cold water in those that have previously held beer; and though all such misadventures can be avoided by careful washing, it is possible to guard against them by having different sets of jugs for every purpose. For instance, common brownstone quart jugs at 8d. each or so are admirable for hot water; and when this is laid on to an upper floor, it is wise to keep them handy to the tap, as then everyone knows where to find them, and members of the family can often help themselves and save the time of servants, which is so much required for other purposes. The common white jugs are best for milk, and a large white basin with a spout is the thing of all others to put the new milk in when it comes, so that the surface may be skimmed of the cream that has risen in a few hours, if such be the custom of the house, and the residue poured out without spilling. Distinctive jugs should also be used for beer, and for nothing else; and very quaint but inexpensive brown ones are made for the purpose, while Doulton's beer-jugs are very ornamental. Most jugs are made in sets of three or five of a pattern, and very pretty many of the modern ones are. Everyone must please themselves as to the kind of spout they prefer, for no two people seem to be of the same opinion concerning them.

A few pint basins should be found in every kitchen; they cost about 4d. each, and are useful for a variety of purposes; and white pudding-basins, which are furnished with rims, round which a cloth is tied, should also be provided in assorted sizes. Many of these are now made with flutes inside, so that a boiled pudding when turned out of them is marked with the pattern; and white earthenware moulds, round and oval, for jelly, blanc-mange, &c., are very preferable to those made of tin and copper, because they are so easily washed and cleansed. They are not now expensive, from 6d. to 4s. each, according to size and pattern. The kitchen tea-pot is usually of earthenware, brown or black; and quite a large-sized one may be had for 1s. 6d.

Hot-water jugs proper, with metallic lids, suitable for sending up with the teapot, in lieu of a brass or copper kettle, are made in very beautiful classic shapes and patterns. Of course they are not cheap,

but 3s. 6d. buys a pretty handsome one, and it is easy to go to higher prices, though not satisfactory to give much less.

Mending.—There are two ways of mending broken earthenware—one by means of cement, and the other by riveting. Almost every chemist sells a cement for the purpose, and it is wise to keep a bottle of it in the house. An old but very good one goes under the name of “Diamond” cement, but white of egg often answers the purpose. It may be roughly said that cement does very well for ornaments and things that are not very often washed, and that riveting is the best process for piecing together articles of daily use. In applying cement the broken edges of the earthenware must be warmed by the fire, and brushed over with the liquid, and then pressed close together. Most cements have to be liquefied by standing the bottle in a cup or basin of hot water. Riveting is not the work of an amateur: it requires considerable skill and dexterity, and is not altogether devoid of risk of further breakage.

Washing-up.—Though washing-up is an operation often done in crocks and pans, and also in tin or zinc trays (which require to be well cleansed from grease), all delicate things in glass and china should be washed in a small wooden tub, and in nothing else. Brittle articles do not go against the wood with such a jar, and are consequently less liable to break; but the tub should never be allowed to be out of use, even for a week or two, unless filled with water, or the wood will shrink and the tub leak.

Decanters when washed should be turned upside-down to drain in a properly constructed wooden frame, into which they are put neck first. Some butlers’ or glass pantries have these holes cut in a shelf, and very useful they are. A glass-pantry or cup-cupboard should always have little hooks round it, on which to hang the teacups by their handles; and similar, but larger, hooks along the shelves of a kitchen dresser are serviceable for jugs and mugs. The ordinary arrangements of a kitchen dresser are, however, too well known to need description. They appear to be the result of the survival of the fittest, and can hardly be improved upon. It may be well, however, to remark that the hooks should be of the \cup and not the \perp form. The end of the latter may, and often does, cause a careless girl to catch the handle and break it in taking a eup off, while the other shape does not do so.

Estimates.—We now give a couple of estimates, very similar to those issued by well-known firms, calculated for the wants of a very small, and of a middle-class household, in the way of china and

earthenware. Cheaper lists can be found, and it is easy to go to a great deal more expense; but these may be regarded as sample estimates for ordinary people, and will procure things really good:—

ESTIMATE No. 1.		£	s.	d.
Dinner service (64 pieces), comprising 12 meat, 12 pie, 12 cheese, and 6 soup-plates; 6 dishes in sizes; 1 soup-tureen; 2 sauce-tureens; 2 vegetable-dishes - - - - -				
		1	2	6
Simple dessert service, comprising 12 plates; 6 fruit-dishes - - - - -				
		0	10	6
China breakfast and tea service, comprising 6 breakfast-cups, saucers, and plates; 6 egg-cups, 1 milk-jug; 6 tea-cups, saucers, and plates; 1 slop-basin; 1 cream-jug; 2 bread-and-butter plates -				
		6	16	0
Double toilet service, comprising 2 ewers and basins; 2 soap-dishes; 2 brush-trays; 2 chambers - - -				
		0	13	0
Servants’ toilet service, comprising 1 ewer and basin; 1 soap-dish; 1 brush-tray; 1 chamber - - -				
		0	3	9
Set of three jugs - - - - -				
		0	1	0
Hot-water jug - - - - -				
		0	1	0
Pair of quart decanters - - - - -				
		0	4	6
Twelve wine-glasses - - - - -				
		0	1	9
Twelve tumblers (half-pint) - - - - -				
		0	2	9
Two soda-tumblers (pint) - - - - -				
		0	0	10
Pair of cut-glass salt-cellar - - - - -				
		0	1	0
Water-jug and 2 glasses for dinner-table - - -				
		0	2	6
Water-carafe, with 2 tumblers to fit, for washstand -				
		0	1	3
Glass singar-basin - - - - -				
		0	0	9
Glass butter-cooler - - - - -				
		1	0	0
Glass cake-dish - - - - -				
		0	1	3

KITCHEN.

Three tea-cups and saucers; 3 plates; 1 slop-basin; 1 milk-jug; 1 bread-and-butter plate; 2 half-pint mugs - - - - -				
		0	3	6
Six plates and 2 meat-dishes - - - - -				
		0	3	0
Three assorted pie-dishes - - - - -				
		0	1	4
Four white basins - - - - -				
		0	1	0
Three pudding-basins - - - - -				
		0	0	10
Four brown covered jars - - - - -				
		0	1	9
One covered bread-pan - - - - -				
		0	2	6
Tea-pot - - - - -				
		0	0	9
		£5 0 0		

ESTIMATE No. 2.		£	s.	d.
Dinner service for 12 persons, containing 108 pieces -				
		4	14	6
China dessert service for 12 persons - - - - -				
		2	2	0
China breakfast service for 6 persons - - - - -				
		1	5	0
China tea service for 12 persons, containing 35 or 40 pieces - - - - -				
		1	10	0
Double toilet service, various designs - - - - -				
		1	7	0
Single toilet service, enamelled - - - - -				
		0	14	0
Single toilet service, printed - - - - -				
		0	8	6
Two single toilet services, for servants - - - - -				
		0	8	0
Two sets of jugs (3 in each) - - - - -				
		0	6	0
A covered hot-water jug - - - - -				
		0	2	0
Pair of cut or engraved quart decanters - - - - -				
		0	18	0
Pair of cut or engraved pint ditto, to match - - -				
		0	12	0
Claret-decanter - - - - -				
		0	10	6
Twenty-four wine-glasses, cut or engraved (12 each, ports and sherries)- - - - -				
		1	1	0
Twelve clarets - - - - -				
		0	14	0
Twelve champagnes - - - - -				
		0	18	6
Six liqueurs - - - - -				
		0	4	9
Twelve coloured hock-glasses - - - - -				
		0	5	0
Twelve cut half-pint tumblers - - - - -				
		0	8	0
Four pint soda-tumblers - - - - -				
		0	2	0

	£	s.	d.				
Twelve finger-glasses - - - - -	-	0	10	0	KITCHEN.		
Four cut-glass salt-cellars - - - - -	-	0	6	0	Four tea-cups and saucers; plates; milk-jug; slop-	£	s.
For cut-glass carafes, with tumblers to fit (for dinner-	-	-	-	-	basin; bread-and-butter plate; 2 mugs - - -	0	6
table) - - - - -	-	0	16	0	Six meat-plates; 6 pudding-plates; 3 dishes, in sizes;	-	0
Three water-carafes and tumblers (for toilet sets) - - -	-	0	4	6	2 vegetable-dishes - - - - -	-	0
Glass jug - - - - -	-	0	2	3	Three pie-dishes - - - - -	-	6
Six custard and 6 jelly-glasses - - - - -	-	0	12	0	Set of four white jugs - - - - -	-	0
Cut-glass pickle-jar - - - - -	-	0	3	0	Six white basins, in sizes - - - - -	-	0
Two pairs of glass knife-rests - - - - -	-	0	2	6	Four white pudding-lasins, in sizes - - - - -	-	0
Four oval glass dishes - - - - -	-	0	9	0	Brown pan, white inside - - - - -	-	0
Cut or engraved glass water set (jug and 2 goblets) - -	-	0	12	6	Six brownstone covered jars, for stores - - - - -	-	0
Cut or engraved eelery-glass - - - - -	-	0	5	6	Covered bread-pan - - - - -	-	0
Cut-glass sugar-basin and cream-ewer - - - - -	-	0	4	0	Covered cheese-pan - - - - -	-	0
Cut-glass butter-dish - - - - -	-	0	2	0	Tea-pot - - - - -	-	0
Glass salad-bowl - - - - -	-	0	2	6			
							£25 0 0

KEEPING ACCOUNTS.

ONE of the most valuable aids to economy in domestic management which can be named, is the practice of keeping a regular and accurate account of money received and money spent. There are some people who have no belief in the value of this practice; they think that for a busy housekeeper who has thrifty ways and industrious habits to spend time and energy in putting down sums received and spent in a book, is simply waste of effort and a useless trial of the spirit. Again and again we hear it said that it is impossible to be more than entirely thrifty, or to do more than to refrain from buying anything that can be avoided. "How is it possible," it is asked, "that a woman who never spends a penny more than she can help, can gain anything by keeping a record of her own denials?" To this question we should reply that a chief advantage of keeping such a record is that it does duty as a mirror, and enables the housekeeper to see her own doings from the outside, as if she were somebody else. The people who "never spend a penny more than they can help" are very few and far between, and still more exceptional are the people who spend wisely. Decidedly, the wise spenders are not most usually found amongst those who most need to be economical. People who are badly off very frequently spend their little foolishly, and yet there is small likelihood that they will mend their ways, simply because they do not know their own weakness. If they would begin at once and keep a record of their expenditure, and would compare these records with each other from time to time, they might become acquainted with facts which would astonish them.

It is perhaps needless to say that if household accounts are to serve as aids to economy, they must be strictly and regularly kept. Some people have a notion that the great object of keeping accounts is to make them balance; and if there is a deficiency on

one side, or a surplus on the other, they will add a little to a sum here, or take away from a sum there, and so make the items "come right." Other people are much given to "making believe" with their accounts. They keep them, as it were, with an eye to posterity, and are careful never to put down in them any outlay that would look bad in a biography. With this idea they place together all articles which they do not wish to come to the front, under the convenient term "Sundries," and place in bold relief only what is necessary and common-place. Accounts like these are of little use. If they are to be of value, accounts must, before everything else, be honest. We should let our foolish purchases stare us in the face; look at our mistakes boldly, and record them in legible characters. Very laudatory, from this point of view, was the practice of the housekeeper who, when her accounts did not balance, cast them out clearly, and then put on the side on which there was a deficiency the amount thereof, under the heading "Discrepancy," and ruled it off with a line in red ink. Discrepancy is a long word; it cannot well be lost amongst other words, and the housekeeper who saw it in evidence every time she turned over the pages of her account-book, would certainly do what in her lay to secure accuracy, if it were only for very shame.

Privacy.—Housekeepers are much more likely to keep their accounts strictly and accurately if they know they will be private. It is not always possible or convenient to keep accounts under lock and key; but each member of the household might easily be made to understand that it is considered a most dishonourable action to look at the accounts of another. Occasionally husbands think that their position gives them a right to examine the housekeeping accounts, and they will have a certain day for looking over the

household expenditure, and remark upon what they regard as unnecessary outlay, and sometimes will even graciously put their mark to an account that has been audited and found correct. Such a practice never prevails in a well-ordered and really happy household. There the heads thereof divide responsibility between them. Undoubtedly, if a wife is imbecile and unequal to the task which devolves upon her; or if she is a bad woman, and cannot be trusted; or if she is uneducated, and cannot add up an account; or if she is ill, and wanting in physical strength; the husband must make the best of the misfortune which has come to the family, and do his wife's work as well as his own. But if none of these evils exist, and the wife has ordinary reason and health of mind and body, he may be quite sure that he is making a great mistake in supervising the household expenditure; he is adding needlessly to his own anxieties, and he is not making the most of the possibilities of the situation. A man may be very clever, but if he has to go away to business every day he cannot control a household so effectually as can a woman who brings will and capacity to the task, and who is accustomed to remain at home. The way to create this will and capacity is to make demands upon them. The cleverest housekeepers are those who have had responsibility thrown upon them; and the husband who deliberately takes responsibility from his wife by constituting himself the judge of the wisdom or the folly of household expenditure, is not only doing what in him lies to make his helpmeet a feeble and "feckless" instrument, but he is offering an insult to her. The man who cannot trust his wife to manage his household ought not to have married her. By withholding his trust he implies that he has made a mistaken choice in matrimony, and to the woman who is doing her best this is an insult.

It is quite true that there are many wives who, with the idea that it is pleasant to have everything open and above-board, request their husbands to look over the household accounts; and, doubtful of their own powers, feel more satisfied when he declares that everything is as it should be. The fact that a wife has made a request of this kind undoubtedly alters the position of affairs. It relieves the husband from all suspicion of arbitrariness; but it also stamps the wife as incapable. As households are at present managed, to keep the household accounts is part of the business of the mistress; and a mistress who is resolved to do her duty will never think of shirking it. After a little experience she will find that to keep accounts accurately and carefully is a great help to orderly management and to economy. Yet the task need not be at all formidable. Very little time and trouble need be given to

it, and still it may be done so effectually that at any time the housekeeper can tell at once what the financial situation is—how much has been spent, how much can be spent, how much ought to be spent, and where a saving can be most easily made. Accounts that can do all this for us are worth having, and it is believed that they are within the powers even of housekeepers who are not accomplished book-keepers (for this few housekeepers are), but who have a fairly clear head for what is passing around them, combined with a knowledge of the first four rules of arithmetic. To people thus moderately gifted, who wish to be put in the way of keeping accounts successfully, the following suggestions will, it is hoped, be helpful.

Regularity.—The plan which is adopted for household accounts is a detail of relative unimportance, compared with that of doing the accounts every day systematically, regularly, and thoroughly. It is because people will do their accounts by fits and starts that they get into difficulties. At the beginning of the year, or when a new book is begun, they enter every purchase under its allotted heading with the greatest particularity. Soon they get tired, and defer the entries for a day or two; then they have to make up the account from memory, and their memory fails; they cannot imagine where the money has gone; then the temptation arises to "cook" the accounts; put a number of articles together under the convenient term "Sundries;" add a trifle here, leave out a trifle there, and so make the sums balance. It is very obvious that accounts thus kept will be absolutely worthless. Before everything, regularity and accuracy are required for household accounts, and the only way to secure these is to determinedly form the habit of writing down each day's expenses every day, and to balance them on a certain day every week.

Sometimes housekeepers who pay ready money, having bad memories and many distractions, find it difficult to remember even the daily purchases long enough to put them down. When this is the case, it is a good plan to carry a small tablet in the pocket when shopping, and to enter each item as it is paid for. These entries can be made very quickly and quietly, the habit of making them is easily formed, and they prevent all possibility of mistake.

Tradesmen's Books.—When paying ready money is the rule, it is comparatively easy to keep accounts. With the best intentions, however, there are few housekeepers who can pay ready money for everything; there must be some necessaries which have to be allowed to "run on," and for which credit must be taken. In cases of

this kind it is well to keep a separate memorandum book for every tradesman giving credit, in which book payments can be entered on one side and purchases on the other. This memorandum book should be provided with a pocket, in which can be placed small bills which contain a detailed statement of all goods sent in. If these bills are examined and ticked as correct before being laid in the pocket; if it is understood by the tradesman that nothing is to be acknowledged as ordered which is not sent in accompanied by a small bill, and properly ticked; if the orders of the mistress only are honoured; and if, before the account is paid, the amounts are seen to agree with the amounts of the small bills—a perfect check will be kept on the tradesman's accounts, and there will be almost as little danger of mistake with the credit accounts as there is with the ready-money payments. The management of these small books will involve a little trouble, without doubt; but they cannot be dispensed with safely when credit is taken. So much danger is necessarily associated with the credit system, that if loss through it can be avoided by means of nothing more terrible than a little trouble, the housekeeper ought to be abundantly satisfied.

It has been said that it is comparatively unimportant what plan of account is adopted, if only the account is regularly kept. We may add, however, that when a housekeeper has become accustomed to a certain plan, has mastered its possibilities, and *found it answer*, she would be wise to be faithful to it. The excellence of a plan is determined by its success. If her accounts give the mistress of a house information as to her past and present position and her future prospects in pecuniary affairs, she is recommended to continue to keep them in the way which has answered so well, and not to mind if they are a little peculiar. It is not given to every housekeeper to be able to keep complicated and elaborate accounts of a sort which would bear to be inspected by an expert, and would reflect credit upon the accountant. Accounts which prove helpful to the individual who keeps them; which show a housekeeper what money she has had, and what is in hand, and also how the money spent has been apportioned; whether there has been undue extravagance in any direction, and where retrenchment will be most effectual if retrenchment must be made, do not leave much room for improvement. To suggest any change, therefore, in such a case would be to create confusion and bewilderment. Under such circumstances, the best advice which could be given would be—"Let the housekeeper follow her own ways, and be thankful that she can manage so well."

If, however, it should happen that any readers

have hitherto refrained from keeping accounts, either from dread of the trouble or fear of the difficulty of the undertaking, they are strongly advised to begin from this day, and see what can be done. They will find that accurately kept accounts are not only a great assistance to the management of the income, but that they are also exceedingly interesting. Faithfully kept accounts preserved through several years furnish a record of the household history—of the needs, habits, and doings of the persons concerned—the like of which can be obtained from no other source. They are therefore most valuable for reference, and no housekeeper who had learnt to appreciate their importance would ever consent to be without them.

How to Begin.—The housekeeper, then, who is about to begin to keep accounts, and who wants a simple plan which will yield full information, is advised to proceed as follows:—Get two books: one a good-sized rough diary or scribbling journal, simply ruled for cash; the other a smaller book, also ruled for cash, which is to be used as a cash ledger. In the large rough "general" book are to be entered daily the items of expense as they occur, and the value of the diary will be to give the *details* of expense as much as possible. A knowledge of these details, it will be understood, is of great importance in household management. Sometimes housekeepers are content if they set down the "lump sums" which are expended, and in this way they lose the benefit of their own experience. Supposing, for example, they found, on balancing their cash-book at the end of the month or the quarter, that in the week ending January 24th an unusually large sum had been spent at the butcher's; the mere sight of the figures would tell them nothing. But if they could at once investigate the details, and, turning to the general account book, discover that on January 21st three or four friends came to dinner, and on January 23rd the sirloin was sent in exceedingly fat, and the butcher had been remonstrated with concerning the fact, the situation would be at once made clear. The mistress would not only acquit herself of extravagance, but she would also be reminded that meat which is too fat is not profitable, and that very fat sirloins are luxuries to be avoided. Of course details of this sort may be pronounced very insignificant and absurd, and not worth remembering. Housekeepers, however, who wish to make accounts help economy, must realise that it is the insignificant things which tell; and that if economy is to be secured, the small details must on no account be despised.

In the rough general book, therefore, let details

be given as much as possible, and let pains be taken to give every information likely to be of use. Begin at the beginning of the book, and devote a double page, consisting of two leaves, to each week of the year. At the top of the left-hand page write down the date—"Week ending January 10th," for example—and, if liked, the sum which is devoted to house-keeping. Rule a line at the side of the right-hand page to make a margin about an inch wide. This margin is for the day of the week, and is best written down on the day itself, not before, because then the amount of space given to each day need not be limited, but the housekeeper can use as many lines as she likes. Every day write down the day of the week, and then straight away as they occur the sums paid away on that day, with full details concerning them—the fuller the better. These entries will be all that it will be necessary to make every day; and even if the household is large, and there are several items to enter, the business need not occupy more than a few minutes, and it will be no trouble at all for the housekeeper with whom it is a habit.

Balancing.—The work of balancing household accounts should be done in a quiet room, where the housekeeper can be free from noise and confusion. If she is a mother, she would be wise to do it after the children are asleep in bed; if she is a busy person, she should take care to guard herself from interruption. But she must give her whole mind to the business in hand if she would avoid mistakes. Having once mastered the art of keeping accounts, she will find that her distaste for it has gone; her financial statements have all at once become most fascinating and interesting. To housekeepers who are honestly trying to pay their way, and to make income liberally overlap expenditure, it is a real satisfaction to discover from the household accounts that money has been judiciously laid out, and that full value has been obtained for money. Arithmetic never flatters—it tells the plain truth without any adornment; and, therefore, if our accounts do not blame us, we are justified in congratulating ourselves that we have done fairly well.

Every week the weekly accounts must be balanced. To do this, first add up the sums; compare the amount with cash in hand, and be sure that there is no mistake. Remember also to note whether the weekly expenditure has exceeded or come within the proportion of income accorded to it. Then cast out on a scrap of waste paper the sums which have been spent on each tradesman (the sums only, not the details), in order to ascertain how the weekly income has been divided. For example, find out how much of the weekly income has

gone to the baker, how much to the butcher, how much to the laundress, how much for sundries, and so on.

Now turn to the end of this general housekeeping book, and give two pages or a full leaf to each one of these groups—that is, give a leaf to the baker, a leaf to the butcher, a leaf to the laundress, a leaf to sundries, &c. Rule a line, make a margin for the date, then set down the sum spent every week on the group to which the sheet is devoted. If the person who keeps the accounts is responsible only for expenditure of living, it will be necessary only to give a page to each tradesman, with an additional one for sundries. But if she keeps the accounts for the household, she may add indefinitely to the number of her divisions—give a page for gas, a page for wages, a page for travelling, a page for doctor's bills, a page for school-bills, a page for dress (or, it may be, a page for the dress of each member of the household), a page for amusements, a page for repairs, and a page for renewals. In any case, it will be well to begin to take the pages from the end of the book, and work backwards, rather than to set apart a few pages at the end, as so many housekeepers do, because then new groups can be added as they suggest themselves to the mind; and it is wonderful how rapidly, when once we begin to keep accounts systematically, we discover new sources of expense. Still, it must not be forgotten that weekly entries only, or (as in the case of gas or coal) monthly or quarterly entries, are to be entered in these groups. Details belong to the other end of the general household account-book; and if it is felt to be desirable that they should be preserved, as may well happen with regard to such things as school-bills or dress expenses, these details must be set down separately, as the household details were set down separately in a part of the household book set apart for the purpose. Such details as can be used for reference afterwards are often of the greatest value, and only make confusion when too much in evidence. But the pages at the end of the general book are exclusively for entering weekly "lump sums."

Perhaps the method recommended will be made clearer if a sample page is given of a week's accounts as entered in an imaginary rough diary, with a specimen of the divisions taken therefrom at the end of the same book. It shall be supposed that the accounts represent the expenditure of a household consisting of master, mistress, two children, and one servant, with a weekly allowance of £2 10s. If "dress," wages, and similar items were paid out of the weekly allowance, such items would of course need to be set down also, but it is here supposed that the accounts include only what are known strictly as household expenses. It

can be bought to greatest advantage in a quantity, and so will try to make one week work in with another. For the weeks in which she has a little money in hand, however, she will be careful to make her statement thus:—

Week ending January 17th.						£	s.	d.
Cash in hand	-	-	-	-	-		3	10
Amount received	-	-	-	-	-	2	10	0

Thus she will gain a clear idea of her exact position.

So much for the weekly keeping of accounts; and it will be evident that there are hundreds of housekeepers who profess to keep thorough accounts, who never go beyond this general household book. From it they learn how much is spent per week on living expenses, and what proportion of the amount is devoted to each tradesman. The knowledge thus supplied is valuable to them, and the majority of housekeepers do not care for more. Yet still, if accounts are to be as helpful as they might be, it is necessary to go further than this, and to keep a ledger account as well as a diary.

Ledger.—This ledger may be entered monthly, quarterly, or yearly, as preferred. Some householders balance their ledgers according to their incomings. Thus, those who have a fixed salary, and are paid every month, balance their accounts monthly; those who get dividends half-yearly, balance their accounts half-yearly; and so on. Other householders balance their accounts according to their payments; so that, because they pay wages monthly, they balance accounts monthly; or because they pay rent and taxes quarterly, they balance accounts quarterly. It does not signify very much what the interval allowed to lapse between the periods is, so long as the work is done regularly and at fixed intervals. Of course the business is easier if done at short intervals, than at long ones; and accounts are more readily made accurate when memory gives her aid, than when reliance has to be placed only on figures. Yet even at long intervals, such as six months or a year, it is quite possible to obtain a perfectly truthful idea of the pecuniary position from the balanced accounts, if only the weekly entries are accurately and regularly made.

For the sake of illustration, let it be supposed that the accounts are to be balanced quarterly, and that the ledger is to be entered quarterly. In doing this, let the housekeeper take an account-book and allow a double page for each quarter. The left-hand page will be the credit side of the account, the right-hand page will be the debit side. At the head of the left-hand page write "Quarter ending" (such a date), and rule lines to make an inch-wide margin

on the left of each page, and columns for pounds, shillings, and pence at the right of each page. On the left-hand page set down all the money received during the quarter, with any money in hand there may be. On the right-hand page set down all payments which have been made during the quarter, taking the amounts from the statements on the pages at the end of the general house-keeping book. Many of these items will need only to be simply entered straight away in the pounds, shillings, and pence columns; others will need to have each item set out in detail, the total sum only appearing in the pounds, shillings, and pence column, and their items on the second of the two columns. Thus we will suppose that the housekeeper employing two servants wishes to set down her payments of wages. She pays one servant £12 per annum, the other £16 per annum. In this case she would make the entry thus:—

		£	s.	d.	£	s.	d.
June 21st	Wages—						
	Housemaid - -	3	0	0			
	Cook - - - -	4	0	0			
		<hr/>			7	0	0

Dress would be set down in the same way, giving the amounts spent on each individual member of the family thus:—

		£	s.	d.	£	s.	d.
June 21st	Dress—						
	Master - - - -	7	10	0			
	Mistress - - -	6	0	0			
	Baby - - - - -	2	10	0			
		<hr/>			16	0	0

In such entries as rent or taxes, where payments have to be made quarterly, there would of course be no need to make the double entry; but the amount could be cast out to the second column straight away. It will be seen that if the entries are accurate, the accounts when balanced will give a complete idea of how the money has been spent. And anyone with an average knowledge of arithmetic might keep accounts according to this method for a household of moderate size, and yet need not spend more than five minutes each day, twenty minutes at the end of each week, and an hour each quarter upon them.

The following is an imaginary sample of the way in which the quarterly statement would be entered in the Cash Ledger. The amounts would have to be obtained from the sum of the weekly entries made in the general diary.

Quarter ending				Quarter ending.....					
Date.	Amount received	£	s.	d.	Date.		£	s.	d.
					Rent (1 quarter to.....)				
					Taxes—Income	- - - -			
					Assessed	- - - -			
					Water Rate	- - - -			
					Gas (1 quarter to.....)				
					Coal	- - - -			
					Living Expenses (13 weeks at.....)				
					Dress—Master	- - - -			
					Mistress	- - - -			
					Children	- - - -			
					Wages	- - - -			
					Railway Ticket	- - - -			
					Repairs	- - - -			
					Renewals	- - - -			
					Doctor's Account to.....				
					Travelling Expenses	- - - -			
					Amusements	- - - -			
					Books and Stationery	- - - -			
					Subscriptions	- - - -			
					Charity	- - - -			

Of course it will be understood that the plan here recommended is intended only for housekeepers who are on the look-out for a very simple method of keeping accounts, and who have very little leisure to bestow upon the business. It is not at all intended for very clever individuals who have arithmetic at their fingers' ends, and who have mastered the art of bookkeeping in all its branches. Talented persons of this kind need no suggestions: they are fully equal to the situation, and are to be congratulated upon their capacity. Average housekeepers, however, are not thus gifted, and they may be glad to know of an unpretentious plan of keeping accounts which will serve to guide them through the dark and devious ways through which they must pass, in their efforts to make income pleasantly overlap expenditure.

It must not be supposed, however, that the housekeeper who wishes to gain as much help as may be out of the practice of keeping accounts, has done all that is possible for her to do in this direction when she has put down her payments regularly every day, balanced them at stated intervals, and discovered exactly how and upon what the income has been spent. Such an account would be useful only to throw light upon the past, and to make clear what had been done with that which was no longer hers, having passed out of her hands. Value had been received for it without doubt, and the entries in her scribbling journal, and the receipted bills in her possession, would be evidence of the fact; but still the money would be gone, and the chance of dealing with it, wisely or unwisely, past. The question she should ask herself is—"How are these accounts, neatly balanced as they are, ready to be ruled with red ink and laid away—these accounts, which have cost a good deal of trouble, and represent a large amount of perseverance and determina-

tion—how are they to be made useful to help me to spend more wisely in the future than I have done in the past?"

The reply to this question is obvious. If the accounts are to be a guide, as well as a warning, they must not only be a record of payments made in the quarter which has expired, but they must also be the basis of an estimate of expenses for the ensuing quarter. The housekeeper will do well, therefore, to form a habit of drawing up this estimate every time she balances her accounts, and for safety's sake she will be wise to allow a wide margin for contingencies. Ladies who have never made an estimate of this kind can have no conception of the assistance it is to economy, when the habit of making it regularly has been acquired. Very often it makes all the difference between the good and bad management of the income. It shows the housekeeper exactly where she is; it makes her realise what she can do, and what she cannot do; and it prevents worry and anxiety, by making it easy to avoid what ought to be avoided. Nor need the estimate be limited to a calculation of how much money ought to be devoted to different items of expense; it should include also the supplies of food to be used every week, while the time for balancing the quarterly accounts, and drawing up an estimate of expenses for the ensuing quarter, would be an appropriate time for checking the estimate of ordinary weekly supplies already in use. It has been said in another chapter, that one of the most effectual ways of preventing extravagant consumption in a household, and at the same time of preventing the annoyance and inconvenience which belong to "locking up" food, is to ascertain how much ought to be used weekly, give out supplies weekly, and then make it a rule that they shall last their time. Many housekeepers do not adopt this plan because they find it difficult to make the required

calculation. If, however, they would try a small allowance only of various necessities, and note how long these last, they might easily base their calculation on the idea thus gained, adding one-eighth to the amount for contingencies. And if after doing this they would check their calculation every quarter, when balancing the accounts, they would undoubtedly be doing what in them lay to prevent extravagance, while avoiding friction and annoyance.

A housekeeper who had once become acquainted with the comfort to be obtained from this method of procedure would never willingly dispense with it again. It is one of the greatest safeguards against living beyond one's income which can be followed, and yet, when made from accurately kept accounts, it is scarcely any trouble, and can be managed with the greatest ease. When it is drawn up carefully,

and used faithfully, it is impossible for any housekeeper to slide *unawares* into pecuniary embarrassment. If this foe should enter the household, the victims are at any rate aware that it is approaching them, for a little while before they are powerless to resist it.

Housekeeping accounts are often said to be tiresome and annoying under any circumstances, whilst if carelessly and irregularly kept they are doubtless entirely valueless. Yet experience has shown again and again that, when accurately and methodically kept, they check extravagance and promote thrift to an incalculable extent. At the same time we generally find that those mistresses who have the greatest scorn for them, and who are most eager to avoid them, are exactly the persons who need them the most.

STABLES AND OUT-BUILDINGS.

It is, perhaps, scarcely necessary to say that nothing is more bewildering and misleading than the ordinary advertisement or catalogue summary of house property. The merest hovel with a manger is designated stabling; and even where there is a building which at the first glance, in fine weather, looks fit for a stable, it is often built by someone who has not the faintest acquaintance with the requirements of horses, or put together so slightly that no one with any notion of their value and constitution would entrust a quadruped less hardy than a donkey or an Exmoor pony to its shelter. It is very common in the suburbs of large towns to see a stable and coach-house adjoining a dwelling-house, and with a room or rooms over, which are counted among the bedrooms of the house. This is most pernicious, for however clean the animal may be kept (and he simply hates to be dirty), there must be an accumulation of liquid and other manure, that proclaims itself too unmistakably in the near vicinity to be either healthy or agreeable.

Stabling.—A stable must be dry, warm, and free from draughts; yet well ventilated, and also well drained. A harness-room must have a fireplace in it, and in winter a frequent fire, or the harness will become mildewed, the saddlery damp, and the bits, chains, &c., rusty. Over the stable there must be a loft for the storage of hay and straw; and over the coach-house, a man's room or rooms, because horses are delicate creatures, and the man who has the care of them ought to be close by in case of cough, colic, or any of the other ills to which equine flesh is heir.

Stables, like our own habitations, should, wherever it is possible, be built on a dry subsoil, and on rising ground, so as to secure a good fall for the drainage. People who in other matters are sensible enough, sometimes build stabling in a hollow, or with rising ground round three sides of it, and flat and open in front, under the impression that they thus secure shelter which is beneficial. We know at the present time of well-built convenient stabling, for which the side of a hill was cut away, leaving a sort of curved bay in which stabling for four horses was erected. Everything was spick and span, and no expense spared; but valuable horses died one after the other, and the owner at last reluctantly awoke to the fact that there was not sufficient air circulating round the building, and that so much heat radiated from the sides of the cutting in the face of the hill that the animals were overpowered by it. It is very important that no earth should be banked up against the stable walls, and that there should be no trees near enough to obstruct the light or impede the circulation of air.

To prove how much horses feel a change of soil and air, it is only necessary to bring country-bred ones—in good condition—into London, or even its suburbs, where the soil is clay and the stabling close. The creatures lose their energy, can only be persuaded to keep up their usual speed by fits and starts, and by dint of much urging; they pant and perspire, and get as generally out of health as human beings under similar circumstances, though they frequently get acclimatised in the course of time. When they are driven out into fresher air, they recover themselves to some extent; and if taken

quite into the country will show, even towards the end of a journey, by increased willingness to go, that they feel better and more vigorous, although they are tired.

Horses often suffer very much in health from being placed in stables too recently built or plastered. Damp of this kind is ruinous to their constitutions; and stabling, like houses, should stand unoccupied after erection for some time, in summer if possible, or else be thoroughly dried by means of fires till all the steam is thoroughly drawn out of the plaster.

There is one kind of shelter very desirable in stabling, but sometimes difficult to obtain, and that is a sheltered position for the doors—that is to say, the doors should, if possible, be made to open on the side that is least exposed to the prevailing wind of the neighbourhood. In fact, the back of the building should be to that prevailing wind, as this assists ventilation and allows the doors to be left open without danger.

The height of stabling is as important as that of rooms, if not more so; because we can move about, open windows, and go in and out, though our rooms may be low-pitched, but the horse has to stay where he is put till he is taken out again. The height should never be less than ten feet for small, and twelve or more feet for large stables. Six feet should be allowed for each open stall, and twelve feet for each loose box, with two additional inches for each division, and the same for each end wall, so as to allow for lining. Where a large number of horses are kept, either for work or pleasure, it is desirable to build the range of stabling with division walls, so as to ensure a separate abode for every six or eight horses, with outside doors to each stable, but only sliding doors connecting one with another. This makes it much easier to equalise the tempera-

ture, and prevents the horses from being too much disturbed.

The size of a stable must depend upon the number of horses to be accommodated; and this will also determine whether the stalls shall be arranged in a single or double row. But there is one very important point—there should, if possible, always be a loose box or two for a sick or tired horse. This should be not less than the twelve feet square above mentioned, in order that the animal may be able to lie down and move about comfortably. The best

arrangement for affording this in a small space is probably that shown in Fig. 1, which is a very favourite plan of the St. Pancras Ironworks Company. By arranging thus, two stalls and a loose box are comfortably accommodated in a space no more than eighteen feet square; and it will be found very difficult to get the same into so small a space on any other plan. The manger in the loose box is arranged so as to take the horse away from the

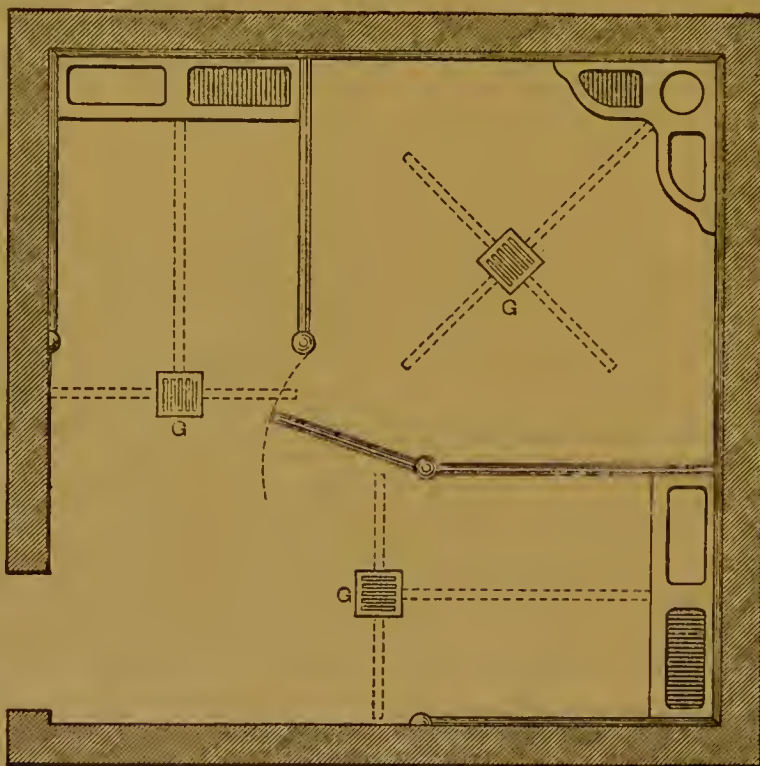


Fig. 1.—PLAN OF TWO STALLS AND LOOSE BOX.

others whilst feeding; and the gratings which drain each stall are shown at G.

Stable Flooring.—The flooring of a stable is extremely important. In many stables connected with old-fashioned middle-class houses they are "pitched," or floored with oval flints (looking something like potatoes) imbedded in sand. This is simply dangerous both to the animals and their surroundings, for, durable as flints are in themselves, the sand allows every kind of moisture to sink in, and giving way from this cause into hollows, the flints get out of place; and if the flooring is taken out, the ground will be found sodden with manure to a considerable depth.

The only cure for this is to remove the earth bodily till not a trace of foulness remains, and put in

a layer of concrete at least six inches thick. It is best made with Portland cement; one measure of cement to six measures of gravel or shingle mixed with sand. This cement is made from a clay that abounds in the Medway valley, mixed with chalk and burned, and it is so far impervious to water that a box or barrel washed over with a solution of it as thick as ordinary whitewash, will retain water for some time—that is to say, some weeks or even months. Before laying down the concrete, the ground must be carefully marked out by driving in stakes to the exact levels that are wanted to give the requisite falls in the stalls, loose boxes, &c., or else there will be waste of material.

A good top-flooring material should combine many qualifications. It must be the very opposite of the flints and sand—that is, it must be water-tight and non-absorbent; smooth and easily cleaned, but not slippery; strong, hard, and durable, and yet of nice appearance and colour.

Asphalte fulfils a good many of these conditions, and sanitarily is almost perfect; but, as everyone knows who has noticed it in the streets, it is terribly slippery when wet, and in the stable it is sure to be more or less wet. The horse that lies down in his stable or loose box with an asphalte floor, often strains himself seriously in trying to get up, to say nothing of the way he slips when walking in or out of it. Some builders advise laying asphalte immediately over concrete, and it is not at all a bad plan so far as dryness goes, though many consider it unnecessary.

Different kinds of cement are frequently used for stable-paving; and as cement is clean, smooth, non-absorbent, and water-tight, and decidedly cheap, it finds favour in many people's eyes. The secret of success with cement is having it well laid, and of good quality; but though not so slippery as asphalte, it is a great deal too slippery to be always safe to the horse. Unfortunately, the best cement is also too easily broken; and much stamping and kicking of iron-shod hoofs, and the fall of stable or any other heavy implements, damages the surface, and causes flaws through which the moisture very soon percolates. Sometimes the cement is laid with a groove surface, which makes it far less slippery, but is very liable to injury; and there is, moreover, always a certain amount of coldness about a stable floored with this material.

Wooden blocks, again, are sometimes used for stables, but they are too porous. Iron blocks or plates are not uncommon. Of their chilliness, however, anyone can judge who sits down for half an hour on an iron garden-seat; and it is a kind of cold that is peculiarly numbing when a horse lies down. Flag-stones and granite are in use wherever they are

plentiful, but the joints are apt to be faulty, or the slabs liable to get loose, and then we have all the old trouble caused by moisture getting in between and underneath.

Extremely good pavement for stables—perhaps, on the whole, the very best—is a small well-made and thoroughly burned brick, well laid in Portland cement, so that there can be no failure at the joints. Such bricks are the well-known Dutch clinkers, which have been used for hundreds of years in Holland, and which can be and are made quite as good in England at the same price. Here they are called adamantine clinkers, and are made with plain and chamfered edges. These, when laid herring-bone fashion, are capital for yards, and for the passages of stables. For the stalls and boxes the blue-black brick called Staffordshire pavior is very much used, and the quality may be known by chipping or breaking. If when broken the brick is seen to be light red it is not good; but if black or purple all the way through it is hard and excellent, and, like all good things, is rather expensive. The surface of this kind of brick is divided into small squares with channels between, the intention of which is to give the horse a good foothold, and to keep a dry surface on the square, while moisture runs away through the channels.

Grooms generally think a good hard sweeping all-sufficient to keep these bricks clean. Major-General Sir F. Fitzwigram, however, in his book on "Horses and Stables," declares that stalls so paved never smell sweet, and the reason is that while one set of grooves is brushed out, the other must retain the dirt, and though they may be swept in opposite directions, dirt has a natural tendency to collect at the corners. The grooves themselves, moreover, are V-shaped, and the broom seldom or never clears out the bottoms of them. For this reason a better form of brick has been introduced, which has only one rounded longitudinal groove (Fig. 2). The best way of laying these blocks for stalls is diagonally towards the gutter down the middle communicating with the drain, as in Fig. 3. These

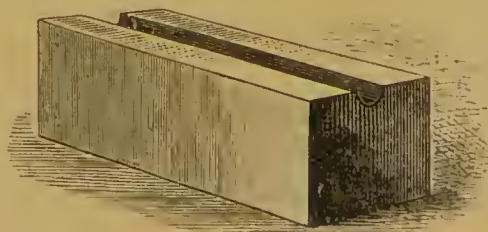


Fig. 2.—IMPROVED STABLE BRICK.

grooves convey all wet at once to the gutter and away; they offer no obstruction to the broom, and are therefore easily swept out and cleansed,

and they give a good foothold. In paving a loose box, the gutters or channels should run from corner to corner, meeting in the middle, where a grating is fixed (as at *g* in Fig. 1); and the best way of laying the grooved bricks in each of the four divisions thus made, is probably with the grooves conducting into the gutters, as in Fig. 4 or Fig. 5. A horse, in lying down in either box or stall paved in this manner, cannot put his feet far in any direction without finding something to give resistance, if the grooving is arranged judiciously, as in either of the plans here given.

Draining.—The gutters should properly have movable wrought-iron tops, and they are often made so as to discharge into central drain-pots

roof; in a word, the stable-drain should be “ventilated” just the same as the house-sewer. One word of caution must be given with regard to this ventilating-pipe, and that is, that it must be used for ventilation alone, and be protected from the entrance of rain by a perforated cap. Instances have been known where a water-pipe has been conducted into the ventilating-pipe, and its efficacy thoroughly destroyed.

The old square brick drains are almost exploded, for they are terribly subject to leakage, and their place has been supplied by cast-iron or glazed earthenware pipes, the former being the most durable, and naturally the most expensive; but whichever is used should be laid on a good sound bed of concrete, and the joints in the earthenware pipes

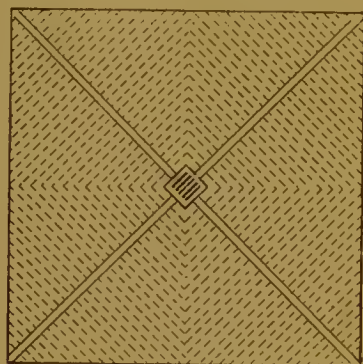


Fig. 4.—LOOSE BOX.

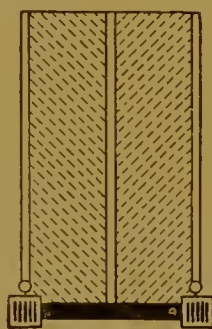


Fig. 3.—STALL.

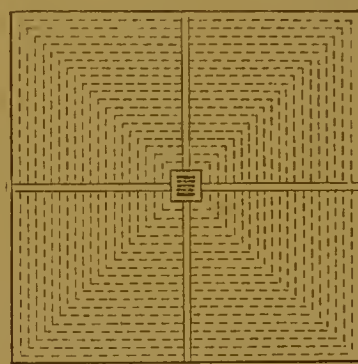


Fig. 5.—LOOSE BOX.

connected with underground drains; but some prefer to conduct the gutters outside the walls, and there discharge them into well-trapped drains; because if the traps are imperfect, and poisonous gases are exhaled, they go straight into the open air instead of into the stable. Many authorities, however, believe that if a syphon drain-pot be used with the syphon cast in one piece with the pot and an outlet nozzle into the underground drain at the bottom, there is no danger, and that the stable is healthier than when the gutter is carried through the wall, which allows the wind to blow up and introduce more cold air into the stable than is at all desirable.

But even the use of a good syphon drain-pot does not invariably prove a security against the return of sewer-gas, for the pressure of that gas may be so great as to force back the water in the trap, or the water may all evaporate, or the gas, if long in contact with the water, may impregnate and partly pass through it. The only way of preventing this pressure of sewer-gas is to ventilate the drain, which must be done by inserting a pipe of the same size as the drain-pipe, or very little smaller, into the top of it, just outside the building, and carrying it up to the

must be made in cement, or those in the iron pipes with red-lead or iron cement. The fewer bends, and the more gradual they are, the better; and branch pipes must always join at an obtuse angle, forming a *Y*; for if they join at right angles there is sure to be a stoppage sooner or later.

It must not be forgotten that earthenware drain-pipes are liable to one special form of destruction, the glaze perishing in course of time, when they may become porous. The trenches in which the drains are laid should never be filled up till they have been properly inspected to see that the joints, &c., are quite right; for it is no joke to have to pull up the whole flooring of a stable in order to find out what is wrong. It is bad enough to have to remove boards, but far worse when it is necessary to get up bricks bedded in cement. Of course the size of all drain-pipes must be proportioned to the amount they have to carry off, and they are better too large than too small. Six inches diameter is none too much for the main drain of a stable, and four inches for each branch pipe. Smaller drains may do for small stables for only one or two horses; but the expense of the larger pipes is infinitesimal compared with the freedom from stoppage and inconvenience.

Where there is a garden, the drains will communicate with a liquid manure tank, which is too frequently drawn upon by the gardener to allow of much accumulation.

Walls.—The insides of stable walls should always be lined with woodwork or tiles, or, better still, with both. The wooden lining should come from the level of the floor to about the height of the manger, and the space from thence to the ceiling should be tiled. Enamelled tiling is impervious to moisture, and not liable to decay. Being on the part of the wall that receives the horses' breath, it is very desirable to keep it nice and clean, by first sponging or washing with a mop (not too wet) and then wiping thoroughly dry. The tiles should not be white, unless the stables are very dark, as white is too glaring for the horses' sight; but there are plenty of nice colours, such as grey, pale green, light blue, and ivory. The top and bottom of both tiles and boarding should always be protected with an iron moulding to prevent injury.

It is essential for horses to have light as well as air, and there are various ways of making the windows. A rough-and-ready but efficient mode is for the whole window, two or three panes in depth, to swing on a pivot, but more elaborate windows have only the central portion thus swung. Every stable of any size ought to have a roof ventilator.

Water and Food.—Stables ought always to be well supplied with water, either by means of pipes and taps, or in the country by a separate well and pump, or a cistern or tank that receives all the rain-water that falls on the roof of the buildings; and the latter should always be fitted with a pump. Stable-buckets should be painted inside and out, the inner paint being white, against which every particle of dirt is distinctly visible and easily removed.

The proper place for a hay-loft is over the stable; it is not only the driest and most convenient place for stowing straw, oats, and hay, but it tends to maintain an equal temperature in the stable. The ceiling should, however, be tight, otherwise it will be impossible to control the ventilation of the stable. There may be a shoot to convey the hay from the loft to the stable, but it should be so made as to shut off, by a door, all communication between the air of the stable and the loft. The shoot ought to convey the hay into some corner of the stable, and not directly (as it does sometimes) into the hay-rack, as in this case the dust and seeds are liable to fall into the horses' eyes. A permanent opening in the ceiling renders the ventilation of the stable very un-

certain, and allows the vitiated air to rise into the loft and destroy the freshness of the hay.

Corn-bins if of wood should be lined with sheets of tin or iron, without which precaution mice will certainly find their way through from the bottom corners; and they should always be secured with padlocks. Where small supplies only are wanted from week to week, very nice portable painted iron bins are to be had, which also fasten with padlocks and take up very little room. The prices for bins to hold a sack of corn each are from 4s. to 6s.

Manger-fittings should be fixed at from 3 ft. 3 in. to 3 ft. 6 in. height from the ground, according to the height of the horses. They should never be of wood, because it is perishable and absorbent, and therefore liable to convey infection from one horse to another; and some horses get into the bad habit of grasping a wooden manger by their teeth while being dressed, or of crib-biting in even a worse form. Whether the hay-rack should be above or below the manger is a matter of opinion, but it is tolerably general to have the low hay-rack for stalls where the horse is tied, and the high one for loose boxes where he is at liberty.

The old-fashioned plan of giving horses water was to offer it to them in a pail; and, of course, this is frequently done still. But where private stabling is built new, or entirely refitted, there are a great many nice, clean, labour-saving appliances available, for the most part made of wrought or cast iron enamelled on the inside, and comprising manger-trough, water-pot, and hay-rack. Water-pots are often made like lavatory basins, with a removable plug and chain; but horses have a great dislike to both, besides which the metal chain often fouls the water. What are called "tumble-over" mangers and water-pots are the cleanest and best, most easily washed and emptied; and while the groom can turn them over with a touch, the most tricky horse cannot succeed in doing so. A waste chamber and pipe below the tumble-over pot prevent wetting the floor of the box.

A sliding hay-guard that can be fitted to any low rack is a sort of gridiron that slides up and down on two upright poles screwed to the wall. When the rack is filled with hay, the grid is laid on the top of it, and the horse eats through the bars of the grid, which follows the decreasing bulk of hay, and prevents the horse from pulling out more than the mouthful he is eating. This is a most simple apparatus, and merely acts by the pressure of its own weight.

Another variety of hay-rack is the "Radial," by the use of which the supply of hay is noiselessly and constantly brought to the upper surface, which keeps the horse from any unnatural straining to get

at his food, while economy in feeding (which is quite necessary, because many horses drop on the ground as much as they eat) is secured by the horse having to pull the hay through the bars of the upper grating. The rack is readily filled; and as soon as that is done it begins its work of pressing the hay upwards by a simple arrangement of spur wheels and weighted levers.

Over and above the ordinary ring over the manger for tying the horse to, wrought-iron fittings are frequently made with two rings in front, one on either side of the manger, for the system of double tying, so particularly valuable for spirited horses. Musgravo's patent tying apparatus is very good indeed; it is partly of chain, so as to prevent the horse from chewing it, and partly of leather, which runs without any noise through vitrified bearings. There is no weight on the horse when at rest; and in case of an accident he can be set free instantaneously by the turning of a screw. The chains can be detached for cleaning.

Carriage-Washing.—It is very desirable to have a box or other space inside the stable, for washing the carriages in cold weather. Concrete flooring does very well for a coach-house, though plain bricks are preferable; but the space on which carriages are washed ought to be bricked, with a central drain, and channels leading to it. "Pitching" does, and is very frequently found where the premises are let on lease, or otherwise; but it means extra wear and tear to the carriage-wheels, and people living in their own houses, and keeping one or more carriages, will find it economical in the long run to lay bricks.

Harness-Room and Coach-House.—The harness-room and coach-house can both be warmed by the same fire as far as is necessary; and it is very desirable to have one with a boiler, so as to have a good supply of hot water for mashes and any other purposes that may be required. A slow-combustion stove with boiler, that needs no fixing, may be had for about £3 15s.; and a good harness-room close or open grate, with boilers, to be set in brick-work, for £6 10s. and upwards. This last kind of grate allows for a separate boiler for the supply of hot-water pipes for warming coach-house or stable, or possibly a lean-to greenhouse on a southern wall, if the stabling is so placed that there is one available. The advantages of an open fire are felt and appreciated when there are cloths, saddles, &c., to be dried; and most stoves are so constructed that by means of dampers either or both boilers may be out of use.

A harness-room should always be fitted with brackets, fixed on the wooden lining or panelling, adapted to take riding and driving harness. They

may be either galvanised or enamelled; the former answering every purpose, but the latter being more ornamental. Over the fireplace there should be a wooden case with glass doors and a lock and key, in which to keep the bits and other small items liable to rust. A harness-room table is sometimes fixed like a kitchen dresser, but wider in proportion. It is made with large deep drawers, and very often with a cupboard as well, in which to keep horse-clothing, saddle-cloths, &c., which saves them from much injury from dust and damp. Every such drawer or cupboard should always be provided with a cake or two of camphor. Tables are also made to stand in the middle of a harness-room, and, if there is sufficient space, are very convenient. A very good sort for small spaces is the combined table and saddle-horse of the St. Pancras Company (Figs. 6 and 7); made with two lengthway flaps, which when opened down form the top of the table (Fig. 6), and when folded up form the sides of the horse on which to clean the harness (Fig. 7). The cupboards are at the sides, and the drawers for leathers and sponges, brushes, &c., at either end, and fitted with locks and keys. These ought always to be locked up when clean and dry, for leathers and sponges are such handy things that they are perpetually taken for all sorts of purposes, left about, and lost.

Other special pieces of apparatus are often found in harness-rooms. A saddle-airer is a frame for receiving the saddle, and exposing and drying the damp surface of the pads. A girth-drier is a light oblong frame with hooks placed exactly opposite each other at bottom and top; the space between being the length of a girth, which is hooked at each end, and can thus be dried without getting creased or twisted. A bit-cleaner is a small apparatus fixed on the wall, but removable; and so made as to hold any-sized bit quite securely, leaving both hands free to clean it. The best harness-cleaning hooks are made with hook-and-eye plates, and will easily revolve, a peculiarity which very much facilitates the work of harness-cleaning. A harness-saddle or horse for cleaning harness on, and also for putting the harness on when taken off the horse, and for carrying it to the harness-room, though not exactly a necessity, is a very great convenience where a good set of harness is often used.

One or two light trestles on which to rest the shafts of a carriage are indispensable in a coach-house; and so is a carriage ladder, padded at the top and painted; and also a carriage-jack.

An out-crusher or cracker, adaptable for maize and beans, is very valuable, and so is a good chaff-cutter; both of which are especially useful where other animals are kept as well as horses. Horses should never be fed by guess-work; but proper measures

should be kept in order to regulate their food. It is possible to multiply such things indefinitely; but a very good supply is two sieves—one for corn and the other for chaff—and a half-quartern, a half-peck, and a half-bushel measure; or the owner can have a corn-meter, fixed in the stable to the lower end of a shoot communicating with a store of oats in the loft. It acts mechanically, is provided with lock and key, and so constructed that it is impossible to draw off more than one feed at a time.

Carriage-lamps when not in use should always be kept in the same position as if they were, and this is secured by having holders fastened to the walls

the other misses her, and often frets after her to the extent of refusing food.

The drainage and ventilation of cow-houses is at least as important as that of stables, though the former must be arranged in a somewhat different manner. The cows should stand on a raised floor paved with longitudinally grooved bricks, such as are recommended for stables; but the bricks should not be carried right up under the feeding-troughs, but just there should be a band of concrete or of well-trodden earth. A hard floor under a cow's forelegs is very much to be avoided, as they are apt to break their knees on it when they lie down,



Fig. 6.—HARNESS-TABLE.



Fig. 7.—ARRANGED AS HORSE.

of the coach-house or harness-room. The latter, being the warmest place, is rather the best for them.

The outer locks and fastenings of stable and coach-house doors cannot be too secure; and the latches of loose boxes, &c., must offer no handle or spike inside, and must be flush with the outer surface. This is not only to prevent horses from injuring themselves and the locks, but also because many of them are very clever animals, and quite capable of unfastening ordinary latches.

Cow-Houses.—Cow-houses or byres are found about many country and suburban villas. They differ from stables in many ways, because the cow, if of a breed suitable to the situation, is not so delicate as a horse; but the secret of keeping cows for profit is to feed them well and keep them warm, say from November to May. Cows like to live two in a stall. They seem to be company for one another, and it is a fact that two or three cows do better than one. If one is taken out of a stall for any reason,

unless they are protected by a large quantity of straw or other litter.

The raised floor should cease, forming a step four or five inches in depth, under the cows' tails, beyond which a wide, shallow, open gutter should be formed, with just a very slight fall. Thus the platform on which the creatures stand is kept clean. The stalls are usually placed so that their heads are to the outer wall, which facilitates the introduction of fresh air, as well as ventilation. Cement and asphalt are frequently used for the platforms, but there are two objections to these materials. They are cold, and slippery when damp, and damp they almost always must be; and, besides, animals with cloven hoofs ought to stand on a rougher floor on account of the double action of the foot.

Where many cows are kept, it is best not to place the heads of the stalls quite against the outer wall, but to allow a passage behind the stalls, along which the food may be brought and put into their racks and troughs. In a wide building there may thus be two rows of stalls with a paved or asphalted walk

or passage in the middle, and a shallow gutter on either side of it.

Each stall for two cows should be from six feet six inches to eight feet wide, with head-rails, and with a dwarf division in the middle, so that each has a separate feeding-place. Cast-iron fittings are by far the best, each terminating in a rounded column, which offers quite a smooth surface to the animals as they turn in or out.

Cows are wasteful creatures, and when they have only feeding-troughs they toss the hay about and drop a great deal on the floor, which, if picked up, is often in an unfit state for them to eat, and is therefore left to be trodden in with the litter. Racks over the troughs are great improvements. When all the fodder, turnips, &c., is thrown into the trough, the cows attack it vigorously at first; but after breathing on it for some time, and dropping moisture from their mouths, they dislike it, and leave off eating; so that the little extra expense of the rack soon pays for itself by keeping the food sweet and fresh till it is all eaten up.

The cast-iron troughs can have water laid on to them, and this enables them to be frequently cleansed and scoured. Cows often have their drink supplied to them in this way, though some owners still prefer having the water drawn fresh and offered to them in separate vessels. This entails a good deal of labour, for the milch cow is thirsty, and requires a great deal of water if she is to give an abundant supply of milk. It is much better to give the water with the chill off in cold weather, and to administer a handful of meal well stirred into the water when the drink is given in separate vessels.

The cost of iron fittings, with open swing rack, separate water-supply, taps, &c., may be reckoned at about five guineas per cow, and for a small villa dairy it is money well spent, if the fittings are put in when the cow-house is built. The application of modern modes to old buildings is seldom so satisfactory.

Straw is the very best litter for cows, but the Irish moss litter is not to be despised; and where large quantities of sawdust are easily obtained, it makes delightful beds for them, and is not without its value as manure afterwards.

No cow-house is complete without a calf-pen, into which a young calf can be tethered when about thirty hours old. It should be within full view of the cow from her stall, as she takes great satisfaction in looking round and beholding the little creature and seeing that it is safe.

Where cattle sleep in open byres round a straw-yard, the fodder is generally placed in wooden crates out in the open, with thatched coverings or roofs,

which keep the food from getting wet and also protect the cows while feeding. Both there and in the fields, unless there be a good pond in the latter, they require drinking-troughs, which must be kept well supplied with clean water. These can either be galvanised or made of cast-iron painted, the latter being the cheapest, but liable to fracture unless carefully handled.

Piggeries.—Where there are cows it is always worth while to keep pigs, because there are butter-milk and skim-milk for them, which supply the whiteness and delicacy of flesh characteristic of dairy-fed pork.

Practical farmers always insist that there is no flooring so good for pig-sties as well-trodden earth. Asphalte, and cement, and even bricks, are cold for the tender feet of little pigs; but Mother Earth seems to suit them, and is neither too hot nor too cold. There is no better way of building Mrs. Pig's sty than with bricks and mortar, allowing her an open yard, with a front gate to it, and a house with simply a gateway, not too wide, so that behind the three-quarter wall she is free from draught, is tolerably in the dark, and yet has ventilation through some half-bricks left out in the back wall, which is considerably higher than the front one. No better roofing for a pig-sty has ever been discovered than thatch, which is warm in winter and cool in summer. Slates are really too hot, for close heat is most distressing to pigs, and culminates in illness and death; in fact, a great deal of the swine-fever is thus caused. Still, they enjoy sunshine, and will not thrive without it. Tiles with felt underneath are pretty good, and modern days have produced iron piggeries, which are very good under shelter, with open yards behind.

Pigs are considered dirty animals; but though they are foul feeders, and will eat up any amount of garbage, a well-bred pig is particular about her sleeping-apartment, and keeps her own sleeping-straw clean, reserving all pollution for the open yard. This yard should slope towards a gutter or drain, but it requires brushing and sweeping out every other day; and during a great part of the year Mrs. Pig and her progeny will be all the better for spending their days in a field or orchard, or in a straw-yard if there is one. In fact, it is only under the conditions where this is possible that it is very much worth while to keep pigs.

One of the reasons for giving young pigs a run in the pastures is that they develop lean and muscle in consequence of getting plenty of exercise, and do their part towards enriching the ground. When confined in their sties, the liquid part of the manure runs from the sloping floor to the open gutter, which

is usually connected with a good-sized pipe that takes it to the tank provided for liquid manure, or to the bottom of the manure-heap in the yard, which has a deepish hollow underneath.

It is very important that pigs should have *wrought-iron* troughs enamelled inside. They are very strong animals, and often turn their troughs over when empty or only partially full, and cast-iron is liable to break. The trough should be always rinsed out with water before a fresh meal or a supply of milk is poured into it, and only enamelled iron troughs can be kept thoroughly clean and sweet. The best kind of trough for young pigs is circular, having seven or nine openings round a standard in the centre, which forms the handle. This prevents them from overcrowding each other, and ensures to every one his fair chance of getting a good feed.

Poultry-Houses.—The profitableness of poultry depends very much on how the birds are housed. The building in which they roost and lay must be warm and well ventilated. If it can have a south or south-easterly aspect, it is very desirable; and if it can be backed against the wall of another building, such as the stable, the additional warmth will prove very beneficial. Not only must rain be kept out of the fowl-house, but wind; for nothing makes fowls so thoroughly miserable as a high wind, and draughts in the house are extremely bad for them. A good tight brick shed makes a capital fowl-house; but when one is built of wood, the boards should be tongued, or else all the cracks and slits between them thoroughly caulked. Either tiles or slates make a weather-tight roof, but scarcely warm enough, unless ceiled or lined with matchboard. Some authorities recommend a boarded roof, with the boards laid horizontally, one edge overlapping the other, and painted with three good coats of tar at first, another coat being added every succeeding autumn. The boards may also be laid perpendicularly, edge to edge, well fitted and tarred, and then covered with two thicknesses of brown paper, which should receive two more coats of tar. Boards covered with roofing felt, which must be annually tarred, also answer the purpose; and so will wood covered with zinc or galvanised iron, or painted. The door should fit well and admit no air except at the bottom. Ventilation should be secured by an opening at the highest point near the pitch of the roof. Well-trodden earth may answer for the floor if kept dry and clean; but Mr. Wright recommends concrete made with strong fresh-slaked hydraulic lime and pounded clinkers, put down hot. The same authority also quotes approvingly a Canadian plan of fixing a broad shelf to the back of the house, and the perch four or five inches above that, and a

foot away from the wall. The nest-boxes or partitions are placed under the shelf, on the ground, require no other tops, and are also open in front. The shelf shades and at the same time protects them, and it also keeps draught from the fowls roosting on the perch. This shelf must be scraped clean every morning and slightly sanded afterwards. The best height for a perch is eighteen inches from the ground for large fowls, up to three feet for smaller; and it should be a rough pole, with the bark left on, which offers a comfortable foothold to the birds.

Fowls are not healthy, especially in winter, unless they have a covered run or shed where they may dust themselves; and where there are farm-buildings of which they have the run, they usually find this in the cart-shed. But in building places for fowls such a covered shed should be placed against the wall, next to the fowl-house if possible, covered with a good sloping roof that extends about a foot beyond the space to be occupied, so as to throw the rain well off, and it ought to be provided with a proper gutter and spouting. The sides should be formed of wire netting, which in these days is extremely cheap; and if boarded all round, to the height of about a foot from the ground, it is all the better and drier. The earth under this shelter should be loose, and a heap of dry ashes—wood ashes being the very best—should be placed somewhere about the floor. When an uncovered run has also been provided for the poultry to sun themselves in, supposing that they have no yard or fields to go into, the builder of the fowl-house has done his duty. If chickens are to be reared, however, a second house, shed, and run is almost imperative. All fowl-houses should be cleansed once or twice a year with a mixture of freshly slaked lime and size, with a little carbolic acid, laid on hot, which dries very white and effectually destroys all vermin. The perches, nest-boxes, coops, &c., should have a coat of it more frequently, and will amply repay the trouble.

Wooden Buildings.—Portable poultry and pigeon houses are kept ready for sale by various manufacturers, and some of these are convenient and useful. They are constructed so as to stand complete in the open, or may be had so made as to put up against an existing wall. Such wooden erections when thoroughly well painted are durable enough. Pigeon-cotes such as are fixed upon walls are, of course, readily procurable, but are only fit for the hardiest kinds of pigeons, such as are kept in the country or round hotels for pies. The tamer kinds of pigeons, such as children love to keep, do not thrive in such exposed quarters, and should

have a shed fitted up for them, or a spare loft, or a wooden house in the garden. But it is impossible to go into the proper details of such structures here.

Any lad, however, with a taste for using tools, ought to be quite capable of putting up a fowl-house, pigeon-house, or rabbitry for himself. Rabbits are, as a rule, best kept in detached hutches under an open shed, which can be put up very easily whenever there is space for it. Generally, where there is a wall available, the best and simplest plan for amateurs is to make a framework by sinking the outer corner-posts and door-posts (if any) in the ground, first charring the ends or coating them with hot lime, and, of course, getting the distances and perpendiculars accurately. The corners at the wall will be sufficiently provided by fastening uprights to it with iron stay-nails, as they are called; and a horizontal piece should be fastened along the wall in the same way, to which to nail the pitch of the roof. Other horizontal pieces joining the tops of the uprights will complete the framing, and joints simply sawn half through each piece of timber will be sufficient. To this frame the boards can be nailed immediately, and match-boarding will make quite a nice job.

Another way is to level the ground first, and lay a timber along the bottom of each wall, into which the uprights are mortised. A structure put up thus on sills does not become the property of the landlord, as one fastened into the ground does, strictly speaking, though there is rarely any trouble in this way with a decent landlord.

In or near towns, however, there are often very strict regulations as to distances at which, and circumstances under which, out-buildings may be erected; and they may often have to be pulled down again unless done under the sanction of the local surveyor. It is wise to avoid all such questions arising, whenever there is the least chance of their doing so. Sometimes, also, neighbours have more or less voice in the matter, under the conditions of the estate, or if light or view be obstructed, or an unsightly structure be erected; and it is only ordinary good-feeling to respect all such considerations, some of which may be very real to the parties concerned. It may be really annoying to have what was once a pretty prospect of some lawn or tree beyond one's own garden blocked up by an ugly wooden box put up by the next neighbour; and even if there be no legal power to prevent it, such things do not promote kindly feeling. This between neighbours is worth a great deal. Generally such matters can be managed all right, and inoffensively, if there is real consideration about them, and a desire to do what is fair.

Dog-kennels should be larger than they generally

are, and have a roof projecting more or less over the front door; otherwise there is very insufficient protection from the weather. Many dogs are *cruelly* housed in this way through pure thoughtlessness or ignorance. A still better plan is to have the kennel much larger than usual, and make the opening at one end of the *side*, and not in front. This is the plan adopted by the principal breeders of dogs who use kennels at all; and enables the animal to get back out of the cold and wet, which do not beat in upon him, but come in at the side. But the best plan for a good dog is to allow him a piece of a good shed, with a bench at the back raised a little from the floor and furnished with a little clean straw. If there are valuable fowls or pigeons in the shed, this plan is a great protection to them as well.

Bicycles and Tricycles.—The growing popularity of cycling has made the question of accommodation for machines a very growing and, indeed, to many, a pressing one. A "safety" bicycle *can* be put in a hall or kitchen, and this is, indeed, one of its advantages. But even a "safety" is not felt to be a blessing in such places; and it is far better, if possible, to be independent of the dwelling-house with respect to them. Of course, if there is a coach-house or other out-building available, the problem is soon solved. When there is nothing of the kind, the best plan is generally to get or put up a portable house, built on sills or very short legs, so that the wooden floor is above the ground and ventilated underneath. Room for cleaning should be allowed if possible, but with a tricycle or tandem machine is not always so. A good cycle costs money, and its good appearance depends very greatly on its proper housing. Very good portable houses are largely made and sold for such machines, either painted, or roofed with galvanised iron; but if one is put up by the owner, as it easily may be, we would strongly advise its being made with a *double skin* of boards, which will do a great deal towards keeping all dry inside. By a double skin we mean one set of boards nailed *inside* the frame and another outside, with an air-space between. If thin match-board is used inside, the outer boards can be bevelled, which gives a semi-rustic appearance and looks well.

The worst difficulty is, that so many of even semi-detached modern suburban houses have really no room to allow any machine (other than a bicycle) to pass; and as a rule portable erections are inadmissible in front gardens. Now and then they may be possible; indeed, we have noticed two such within a short distance in a suburb of London. Of course, in such a position special pains must be taken to finish the house off attractively.

When anything valuable—be it fowls, tricycles,

or pigeons—is kept in out-buildings of any sort, doors and locks should be of the best. Horses and cattle are rarely stolen, their size making detection almost certain, and the consequences being so serious. But the others are very portable property, and favourite objects of depredation, which is not a wonder when we see the utter lack of proper security under which many are kept. Many people greatly under-

estimate the security of a good lock. Such would be very little, probably, to the house itself, if known to contain valuable plate or jewellery; a skilled cracksmen would find no difficulty about it. But it is not the skilled cracksmen who rob hen-roosts and steal bicycles; and in most cases the gentry who do these things would be checkmated by a strong door and a good “tumbler.”

PASTRY, PIES, AND MEAT PUDDINGS.

It will generally be admitted that the essence of hospitality is to please your guests. It is to be feared, however, that too often ladies regard the subject of pastry and sweets more from the point of view of pleasing the eye than the palate. We all know, at an early hour in the morning, after an evening's dancing, that the inner man craves for something more substantial than the “light refreshments” too often designed more with a view of gratifying the vanity of the maker than the appetite of the eater.

There are perhaps few dishes better calculated to give satisfaction to the male portion, at any rate, of your guests on many occasions, such as breakfasts, luncheons, and suppers, than a really well-made cold pie, whether of steak, pigeon, or game; more especially if it is accompanied by a cool salad, and washed down by a glass of *good* champagne (not from the grocer's), or a glass of really fine *bright* bitter ale, well frothed, in a thin glass as bright as itself. We will, therefore, commence our discussion of the subject of pies, puddings, sweets, &c., with that by no means least important part of it—meat pies; and we shall endeavour to lay more stress upon the interior than the exterior.

Puff-Paste.—First of all, it is necessary that all cooks, and all persons who take any interest in the art of cooking, should have a thorough knowledge of the best method of making puff-paste. We will, therefore, first describe how to make this very necessary article, and then proceed to mention the variety of substances which this puff-paste will cover. First of all take equal quantities of butter and flour; take the yolk of one egg and a pinch of salt to every pound of flour, and add a little water. Be careful that the flour is dry and properly sifted; see that the butter is well squeezed in a cloth, so that the moisture may become extracted. See also that the butter is firm, and by no means frozen. The slab on which the pastry is rolled must be clean and cool; and best of all is a marble slab. Of course in the winter no ice is necessary; but in

summer, and especially upon a hot day, perfect success can only be guaranteed by using rough ice. Now put the flour in a heap on the slab, and make what is termed a “well” in the centre, and in it place the yolk of egg, the pinch of salt, about two ounces of the butter, and a little water. Gradually mix in the flour with the other ingredients, using the fingers of the right hand, at the same time being cautious to rub the butter into the flour. Add water in small quantities from time to time, and until all the ingredients have become thoroughly mixed; following upon which the paste should be sprinkled with a little more water, and worked backwards and forwards on the slab for a few minutes, by which time the paste ought to be smooth, soft, and *elastic*. When this is done, take the remainder of the butter, squeeze it, press it flat, and place it on the paste as rolled out. The sides of the paste should then be turned up over the butter, so as to completely cover it. Shake a little flour on your paste-board, and also on the paste. Shape the paste square, and let it cool for about ten minutes, taking the precaution, as given above, of using ice, if in summer, and in a manner hereafter directed. (The square we speak of should measure, say, about ten inches each way.) Take the now cool square on the slab, shake upon it a little flour, and also on the paste, and roll the latter longways—*i.e.*, you need not let it get any wider, but be careful to keep the sides in and make it longer—about two feet long by ten inches wide—and don't forget to keep the edges *square*; in fact, the paste must be rolled in such a manner that its shape is that resembling a large long book rather than an oval tin. When this is done, fold the paste into three; turn it half round, and roll it out again, not forgetting to still keep the edges square. In hot weather it may now be placed in the ice for ten minutes. Again roll it out, fold it into three, and turn it half round so as to enable you to roll it the other way. The paste may be put into the ice again, or left to cool if in winter—three times altogether—and can be rolled out, folded, and half-turned twice or thrice between each.

In rolling out the paste, remember you roll from you, and press downwards. In fact, you roll the paste and make it three times longer, without allowing it to get any wider, being careful to keep the edges square, and not let them get round. In folding the paste into three, you will generally be able to guess pretty well how to make the three flaps the same size. In turning it half round, suppose you have folded it into three, and shut up the paste like a book, with its back towards you. In rolling it out next time, you turn "the book" as if you were going to open it ready for reading. (We merely give these directions for the benefit of absolute novices.) The paste is now ready for use. In making tartlets or cases for cheese-cakes, remember that really good puff-paste a quarter of an inch thick will rise to the height of two inches; and unless this is the case you may take it for granted that your success is not perfect.

In cooling puff-paste in summer, a very little rough ice is sufficient. Provide three good-sized tins, which must be perfectly clean and about a foot square. Place some pounded ice in the bottom tin, covering the same with another tin. Place the folded paste on this tin, and put the third tin—which must also contain some pounded ice—on the top of the paste. A very little ice is necessary, and the top tin should not be too heavy with ice. The middle tin should be lightly floured. It may be mentioned that *tins* are best: dishes would not "convey heat" sufficiently quickly to cool paste nicely. In "cooling" the paste, the heat is conveyed from the paste, or it would not cool.

This puff-paste is suitable for all kinds of pies and tartlets. Great care should be taken in getting really good butter. Unfortunately in the present day there is more difficulty in getting good pure butter than there was some fifty years ago. Since the passing of the "Margarine Act," however, things have somewhat improved; but still we fear that, as regards at least most of the large towns throughout the United Kingdom, it will be found that that Act is a dead letter.

For *ordinary* purposes, one-half the quantity of butter will be found sufficient. But failing sound butter, for making what may be called common paste for pies, lard will be found to answer most purposes. Indeed, very excellent pastry, if carefully handled, may be made with lard or dripping, instead of butter, or with a mixture of both. Good beef fat or suet melted down gently, and poured off before it has time to burn, is very nearly as good as anything that can be used for making pastry for every-day use. Very palatable pies may be made from the dripping from roast beef, veal, pork—if not impregnated with the flavour of sage and onions—or

mutton, though the last-named is thought by some to impart a disagreeable flavour of tallow to pastry. The quantity of fat used, of course, will vary according to the richness required; but half a pound of fat to one pound of flour will make a very fair paste, suitable for every-day purposes; and it may be remembered that a rich crust is neither so digestible nor so suitable for many dishes as a substantial light one, and that the lightness of pastry depends as much upon a light, quick, cool hand, as on a large amount of butter or lard. The addition of a beaten egg, or a little lemon-juice to the water, or a teaspoonful of baking powder to the flour, will make the paste lighter. It should be remembered, however, that though baking powder is excellent for common pastry that is to be used immediately, pies are more likely to *get dry quickly* when it is used.

Take a pound of flour—see that it is dry and free from all lumps, and for this purpose it is best sifted. Then, if butter is used, squeeze it in a cloth, to get rid of any moisture. Mix the paste in as cool a place as possible. For ordinary pies, whether fruit or meat, use half a pound of butter—or butter and lard mixed, or dripping—to one pound of flour. Of course the more butter you use, the richer will be the paste. Avoid, by all means, mixing the paste in a hot kitchen. A marble slab makes an excellent paste-board. Mix the half-pound of butter, or other substances, into the flour gently and thoroughly, adding a pinch of salt to the flour. If baking powder is used, add that to the flour previously. Then moisten with water, or water and lemon-juice—half a lemon being sufficient for one pound of flour. Roll the whole out three or four times, first flouring the paste-board and roller. Roll out to the thickness wanted. This is generally a quarter of an inch thick for meat pies, rather less for fruit pies. A table-spoonful of powdered sugar added to the flour makes the paste into a nice short crust for fruit pies.

Meat Pies.—The next point for discussion is that important part of the meat pie, the interior. As a rule the ordinary beefsteak pie of every-day life is made by cutting up steak into pieces, and putting these pieces in a pie-dish, adding a little water or stock for gravy, some pepper and salt, and then baking it in an oven after covering the pie-dish with some ordinary pie-crust. This pie is all very well in its way, and when cold is very fairly nice; but it will be found, as a rule, that the pieces of meat have the appearance of having been boiled. The gravy when cold is liquid—it is rarely, at any rate, a jelly—and very often this liquid is of a poor, thin, weak, beef-tea-looking colour. Now it is by

no means in consequence necessarily poor; on the contrary, it may be, and probably is, exceedingly good and wholesome; but it is not appetising. It would satisfy the appetite of a hungry farm-labourer who probably has no more eye for artistic taste or appearances than a savage, but it is not exactly the sort of dish to place before anyone possessed of refined tastes. And if hot, the pie has a poor look, the meat is pale in colour, and the gravy watery. If the pie is cold, large wafers of hard fat will be found to have settled on the top of the thin weak gravy; and this is an occurrence that should always be carefully avoided.

Now contrast a pie of this description with a first-rate meat pie, with the outside of the crust of a mahogany colour, and which when cut has a rich yellow appearance. The meat is all close together, and resembles the rich outside of a well-roasted sirloin instead of boiled beef; while when the inside is cut, the meat comes out in one solid slice, owing to the firmness of the jelly which keeps the meat together. And the slice of rich pie-crust is joined to the slice of meat by a stratum of firm clear jelly, by no means the most inferior portion of the pie itself.

To make a good meat pie two things are necessary, too often omitted; these are, (1) the meat must be browned in a frying-pan, and (2) the gravy when cold must be a jelly. Suppose we take 2 or 3 lb. of steak, such as rump-steak, beef-steak, or chuck-steak. First cut the steak into pieces about three inches long, one inch thick, and half an inch wide. Next take a frying-pan and grease it across the bottom, sufficiently so to prevent the meat from sticking. Now take the pieces—two or three at a time—and put them into the frying-pan over a fierce fire, and scorch the outside of the meat so as to make it brown, turning the pieces of steak over with a knife or spoon—a fork may be used so long as it is not stuck into the meat, so as to let out the gravy thereby; and as each of the pieces is browned, take it out of the frying-pan and place it in the pie-dish. Then have by you some good gravy—ordinary gravy it should be, similar in appearance to good strong beef-tea. Next add a piece of onion, about as big as the top of the thumb down to the first joint; chop it up, place the pieces in the pan, frying them in the same way as before; continue to move them about until they turn brown. Then take the gravy or stock, pour the whole of it into the frying-pan, and stir it well up. It will be found that the brown onion and brown dregs of the frying will add materially to the colour of the gravy, which should resemble the hue of dark mahogany. Now place all the meat in the pie-dish, putting as much as possible of the fat on the top of the pie, and add

sufficient gravy to cover the meat, and also a brimming teaspoonful of black pepper. It is wonderful what a quantity of black pepper a cold meat pie will take. Then cover the pie with the paste, and bake it in the oven for about an hour and a half.

This may be described as an ordinary meat pie for every-day purposes, and is generally eaten hot; and the best vegetable to serve with it is good floury or mashed potato. If the pie, however, is to be taken cold, the chief point to be considered is the gravy, which should form a thick jelly when cold. Now the simplest way to ensure this is to add a little gelatine to the gravy, and the quantity of gelatine to add will entirely depend upon the state of the gravy at starting. Of course, if you have some stock which remains a firm jelly when cold, this would be amply sufficient for the purpose, though adding a little gelatine has the advantage of making the jelly stronger than before, and the gravy from the meat itself makes it still better.

There are various things that could be added to a beef-steak pie to improve it. The first of these is one or two sheep's or lamb's kidneys. These help materially to make the gravy, and they also improve the pie in flavour. Bullock's kidney can be added, but is very inferior to that of the sheep or lamb. Another ingredient that may be added with advantage to meat pies is one or two, or even more, hard-boiled eggs. In adding these to the meat pie it is always best to boil the eggs, take off the shell, and let them get quite cold before cutting them up and putting them in the pie. Hard-boiled eggs have a peculiar smell even when quite fresh; in fact, they give off a gas known as sulphuretted hydrogen, and it is a common mistake for young housekeepers to make, to imagine hard-boiled eggs to be bad when they are perfectly fresh; they are also often discoloured, but are not in consequence necessarily bad.

Another very favourite meat pie is that of rump-steak and oysters. Unfortunately, in the present day, oysters have risen to a terrible price. Decent American oysters, however, can be obtained at a very cheap rate, and especially are they largely used in some poor neighbourhoods, proving the truth of Sam Weller's remark that "poverty and oysters go together." These oysters are to be obtained in London at the rate of fourpence per dozen. In adding oysters to a pie, great care should be taken that the liquor of the oyster is preserved. If you prefer having fresh oysters instead of tinned, take care that they are opened over a basin that will catch the liquor. It is as well, if the pie is going to be taken cold, to bear in mind that a little more gelatine must be added in order to allow for the

amount of liquor in the oysters; but steak-and-oyster pie is best taken hot.

A very nice addition to steak pie, which will convert it into a steak-and-oyster pie, is tinned oysters. These tinned oysters are a great deal more palatable than many people are apt to suppose. Remember that originally the whole of these oysters were once fresh, and that now, when the tin is opened, although the oysters themselves have a shrivelled appearance, somewhat similar to the tops of the fingers of an old white kid glove, although the oysters seem to have lost flavour, yet that flavour has gone into the liquor; and consequently, by simply adding the contents of the tin to the steak pie, you have a most delicious dish, which can be eaten either hot or cold; only remember, as we have said, to allow sufficient gelatine to make up for the addition of the oyster liquor.

Pigeon Pie.—This pie, which is generally eaten cold, deserves a few words to itself. A really good pigeon pie is made by half roasting the pigeons, then cutting them up into small joints, removing all the backbones and ribs, &c., which take up a great deal of room in the pie and do not add to its appearance. In order to get as much good gravy as possible, the bones should be stewed in it until they are perfectly dry and bare. The pieces of pigeon can now be packed with the steak, and the proportion of pigeon and steak to make a really nice pie should be about equal quantities of each. Very often a smaller quantity of pigeon is used; indeed, so small that the pigeons are so nearly lost in the quantity of steak in the pie as scarcely to make it worthy of being called a pigeon pie at all. It is far better to have a little and good, than to attempt too much; on the same principle that there is far more real hospitality in giving your guests *good* bitter beer than cheap and bad champagne. Hard-boiled eggs can be added to the pie, and also a few slices of ham or bacon (cut very thin indeed with a sharp knife), which should be placed on the top of the pie. Next with regard to the gravy, made by stewing the bones of the pigeon with ordinary stock so as to extract from them all the flavour. Great care should be taken with this, so that it may afterwards form a hard jelly. As a rule, it will form a jelly simply from the steak and bones. To know that the gravy is ready, throw a teaspoonful into a cold saucer, and if it turns to a jelly in a few minutes, you may rest assured that the gravy is all right. If it does not, you must add some gelatine until it does. It is best, also, to soak the gelatine for half an hour in cold water. This causes the gelatine to swell to four or five times its size, and

when in this state to melt almost immediately it is thrown into the boiling gravy. Now add sufficient gravy to come up to the level of the top of the dish, and cover the pie with some good ordinary paste. Put the pie into the oven for about an hour or an hour and a half. As the steak has been put into the pie when warm, and as the pigeons have been half roasted before placing them in it, and as the gravy should be added to the pie warm, the interior of the pie will cook much more quickly than if the meat had been put in perfectly cold, with cold gravy. This is an important point, as you often run the risk of over-baking the crust rather than that the inside of the pie should not be cooked sufficiently.

Now allow the pie to get quite cold; then take off the ornamental knob of paste (which, we presume, you have placed at the top of the crust), insert in the hole a small funnel, and pour into it some lukewarm gravy until you fill up the whole of the space in the pie between the meat and the crust. Now and then, when this is done, the gravy will begin to ooze out; and if the crust has risen any great height in the baking, a little difficulty may be experienced in filling it up. But what is necessary is to exercise a little patience. Pour in a very little gravy at a time, and directly it begins to ooze out round the edge, leave it until it becomes quite cold. When the gravy is cold, you will find the place where the pie leaked is now, so to speak, mended, and the gravy can now be poured in right up to the top. Then replace the knob, and varnish the outside of the pie-crust as follows:—Take a little aspic jelly, or any clear stock which when cold is a clear jelly. (We all know that this jelly is now sold in pint bottles, and as it keeps good for a considerable time, it will be found very useful for many other purposes.) Put the bottle of jelly before the fire, or wrap a hot cloth round it, and when warm enough pour out sufficient to about half fill a teacup. Take a spoonful of extract of meat and dissolve the same in the jelly. This will convert the jelly into a clear fluid—the colour, indeed, of good dark brown sherry. When the pie is quite cold, take an ordinary paste-brush and dip this into the coloured aspic jelly, and simply paint the whole of the crust with this liquid, and the effect is exactly the same as French polish is to ordinary mahogany. The pie-crust is now bright and shining, and is exceedingly pleasing to the eye, rendering it tempting and appetising.

We cannot too much impress upon the attention of housekeepers who are fond of seeing their dishes sent to table looking nice, and who at the same time have a due regard to the importance and necessity of economy, the great value of these small jars of aspic

jelly ready made, which can be bought at the grocer's for about 6d. a jar. In the first place, in small households, and with the ordinary good plain cook, however competent she may be, really good aspic jelly is a product not only of difficulty, but of considerable expense, when made at home. When we say expense, it must be borne in mind that we refer not only to the cost of material, but loss of time; and in small households where a limited number of servants is kept, remember time is money. Suppose therefore you have a few friends to supper, and among the few dishes placed on the supper-table you have that general favourite a cold pigeon pie, made as we have described, full of good jelly when cold, and into which gravy has been poured, so that the crust joins the meat. Of course *this* jelly is very different from aspic jelly; in fact, it is simply good cold gravy, which when cold is a jelly. It would be quite unfit for ornamental purposes; whereas aspic jelly is nothing unless bright.

Suppose therefore that the pigeon pie is made, has got cold, and has been "varnished," so to speak, with a spoonful of aspic jelly, coloured a rich brown by having a little extract of meat mixed with it. We still have the greater part of the jelly in the glass jar; and when once opened, it will not keep good long. Proceed as follows:—Take two or three table-spoonfuls of the jelly, and place it on a plate, and with a couple of silver forks crush it up into little pieces. Now take a saucer, and drop a few drops of cochineal in it, and take, say, one spoonful of the crushed jelly and shake the pieces about in the cochineal. The jelly will turn a bright red. You can now place little piles of bright yellow jelly on the pie—say at the two ends and the two sides; or you can put a heap in the middle, and four smaller heaps round nearer the edge. Then take half a teaspoonful of the bright red jelly, and place it on the top of the yellow jelly, putting some pieces of bright green double parsley in between the heaps. The appearance of the pie is now quite different; indeed, it looks fit for the wedding-breakfast of a prince. If the supper-table is well lit by gas—or, better still, by lamps or candles with shades which throw the light downwards—this pie might have come straight from the Cave of Aladdin, and been decorated with small heaps of rubies piled upon sapphires. And yet what is the cost? An order at the grocer's for a small jar or bottle of aspic jelly which costs 6d.

Game Pies.—One of the most favourite meat pies at both luncheons and suppers is game pie. Now, this can be made in a variety of ways. We can have game pie made with hare, partridge, pheasant, grouse, &c. A very cheap game pie can

be made by using ptarmigan. These grouse, of course, cost a great deal less than real grouse; and when the meat is cooked for the purpose of eating—in a pie with plenty of good forcemeat—not many persons are able to tell the difference. One great object is the forcemeat, and we find the great objection to this kind of pie is that many persons contrive to make them almost entirely of forcemeat and very little game. It is quite possible to have a very good game pie made without any game at all; and in many hotels and restaurants the so-called game pies are merely forcemeat, which conveys the idea that the meat is game.

The forcemeat for all kinds of game pies is made as follows:—First take some calf's liver; and the whiter the liver, the better. This must be cut up into small pieces and fried in a frying-pan with about an equal quantity of fat ham, to which may be added two or three beads of garlic, and a small tin of mushrooms or a few fresh mushrooms; and when the whole has been cooked, it must be rubbed through a wire sieve, or sent through a sausage machine, after adding a teaspoonful of aromatic flavouring herbs.

Herbaceous Mixture.—These herbs are sold by grocers under the name of "Herbaceous Mixtures," and are certainly the best to be procured, and contain a wonderful property of imparting a game-like taste to anything to which they are added. If a very small portion of these herbs is added to an ordinary meat pie, the impression conveyed is that the pie has been made from meat and game, or that the meat itself is just a trifle high; and therefore we would not recommend the use of these herbs unless indeed the dish contain in it some elements of game. But the herbs make a capital addition to any kind of sauce served up with game, more especially in the case of that very much-appreciated sauce known as Salmi Sauce.

These herbs when properly made keep good for any length of time, and it is well to have some always in the house, as a very little will go a very long way. The herbs are made as follows:—Take 2 oz. of cloves, 2 oz. of white peppercorns, 1 oz. of dried marjoram, 1 oz. of sweet basil, 1 oz. of thyme, 1 oz. of powdered mace, 1 oz. of powdered nutmeg, and $\frac{1}{2}$ oz. of powdered bay-leaves. The herbs should be thoroughly dried in the oven, and it is best to wrap them in two or three sheets of paper, to keep in the aroma; when dry, the whole should be placed in a mortar and pounded, and then sifted through a sieve, and put by in a stoppered bottle for use. A small amount of these herbs—about a teaspoonful—added to the forcemeat we have described, made with one pound of calf's liver, will be amply sufficient to

impart a strong gamey flavour to any kind of meat to which the forcemeat is added; and we would strongly recommend you to make a trial of a game pie of this description, without going to the expense of buying any game at all! A first-class pie can be made from two pounds of the white meat of a rabbit, and one pound of the forcemeat here mentioned. If a little good strong jelly can be poured into the top of the pie, and a little puff-paste added, you may have a dish, at a small cost, which no one need be ashamed of.

In making real game pies from game, it is of great importance to save all the livers of the birds themselves, which may be added to the calf's liver in making your forcemeat. In making a good game pie the whole of the bones should be removed from the birds and placed in a little stock, and allowed to stew till all the bones are white and clean. This gravy should be allowed to boil until it is very strong and very good. This is what the French call making *fumet* of game; and this very rich strong game gravy is added to the meat that has been cut off from the limbs of the birds. Press down the meat and forcemeat into a dish, cover with clarified butter, and serve as game pie similar to potted meat. If served with pie-crust, it should be covered with puff-paste, and the crust should be put on very thick, and some good game jelly poured in at the top when the pie has got quite cold, in order to leave no space between the game and the crust.

When a thick slice is cut out of the game pie thus made, there are few things more tempting; but perhaps the greatest drawback to the dish is that it is somewhat rich. This, to a great extent, depends upon the amount of forcemeat that has been added. The less forcemeat, and the more game, the better the pie. We consider that an average pie should contain one pound of forcemeat to about five pounds of game.

This kind of game pie is very nice made as a raised pie similar to pork pie, in which the outer crust is very hard, and often left on the plate untouched. The crust for these pies is known as hot-water paste, so called from using hot water instead of cold. To make hot-water paste, you take a pound of flour, about a quarter of a pound of butter, and a small quantity of boiling water. Put the water and butter together on the fire in a stewpan until the butter dissolves. Then you add quite a teaspoonful of salt, and mix the whole together; roll it into a ball, and put it by in a warm place until you line the mould in which you make the pie.

Patty-cakes and *vol-au-vents* are made from puff-paste; but in making the puff-paste for these purposes, it is always best to add a little lemon-juice to the water with which the paste is made. In making

large patties and *vol-au-vents*, it is always best to get some common pie-crust, and to place this crust at the bottom of the puff-paste. This common paste should be rolled out to about the thickness of a plate.

Fruit Pies.—These pies, which do not require much comment, can be made with puff-paste or common paste. When you use puff-paste, it is best to finish it off, after being baked, by shaking a little powdered sugar over the top, and then glaze it by means of a red-hot salamander, which makes the sugar dissolve slightly, and gives the pie a rich appearance. If you do not possess a salamander, a red-hot shovel will answer the same purpose. If you use ordinary pie-crust for your fruit pie—that is, if its proportion is one pound of flour to half a pound of butter—it is best, when the pie is baked, to brush the outside over with some well-beaten-up white of egg, and then sprinkle some powdered sugar over the top. The interior of the pie depends entirely upon the nature of the fruit.

Very nice pies can be made from unripe wall-fruit, which is too often discarded and thrown away. In many country gardens there are peaches, apricots, and nectarines, which—thanks to our uncertain climate—positively refuse to ripen; and this unripe fruit is often thrown away. Proceed as follows:—Stew the fruit till tender, with half a pound of sugar to a pound of fruit. Take out the stones, crack them and put the kernels to stew with the fruit. The effect is excellent, and the same as if you had had the advantage of a glass of good noyau. Real noyau is supposed to be made from the kernels of peach-stones, but more often it is made from bitter almonds.

In making an ordinary apple pie, be careful that the apples are tender. Some apples require much longer time to cook than others, and it is sometimes necessary to stew the apples beforehand; and when this is done, a few cloves should be added to them as well as some sugar. A slight addition of lemon flavour is also very desirable; but do not cut the lemon into slices and put it into the pie, as in that case the result would be to give it a turpentine flavour. If you want to convey a flavour of lemon delicately, take two or three lumps of sugar, and rub them on the outside of the lemon, and place the sugar in the pie, which will have the benefit of the lemon flavour, while the lemon itself will remain intact. French cooks call this *zeste* of lemon.

Meat Puddings.—We next come to consider the question of meat puddings, for which what is called a suet crust is generally required. A good suet crust, suitable for all meat puddings, and suet puddings to

be eaten with sugar or jam, is made by mixing well-chopped beef-suet with flour and water. The ordinary proportion will be to allow half a pound of suet to one pound of flour. If you want to make a pudding that is very rich, you will allow three-quarters of a pound of suet to this quantity of flour; and if, on the other hand, you want to make quite a plain pudding, suitable for children, you should not allow more than a quarter of a pound of suet to the one pound of flour.

Many persons prefer meat puddings boiled in a cloth, and not in a basin. Certainly the crust is not so heavy, but then the pudding must be made with care, and the crust must not be too thin. Indeed, a large meat pudding boiled in a cloth, and where the crust preponderates over the meat, is a capital dish for a large family, consisting perhaps of a number of hungry boys.

In making a pudding to boil in a cloth, of course it must be shaped in a basin. The crust is rolled out on the paste-board, and the cloth, after being well floured, is put in a basin, and then the crust placed in it. The contents of the pudding are then placed inside, and the crust is brought over and joined together with the fingers. The cloth, which must be floured at the part that goes over the top, is then brought up and well tied in two places. Next have a large saucepan of *boiling* water. We have underlined the word *boiling* advisedly. It is of great importance that the pudding be plunged *at starting* into *boiling* water, and the water brought to the boil again as soon as possible.

In turning out such a pudding on to a dish after it has boiled, say, for three or four hours (for meat puddings require a lot of time to boil), take the pudding out of the boiling water, and let it drain on a dish for a few minutes before you take off the cloth. Then turn it upside-down, and peel the cloth off carefully and slowly. If it sticks, don't pull it, but keep the edge of a knife against the cloth, and cut away the part stuck. Sometimes, when the pudding is turned out, it will break or burst open into the dish, especially if the pudding is large and has been very thoroughly boiled. Remember, however, that the pudding will taste none the worse; but will, like a Christmas-pudding, be all the better in flavour for the rent in the side, as it shows it is not "stodgy."

If a meat pudding is at all dry, it is a good plan to have ready a little hot gravy or stock (or even, better than nothing, boiling water), to cut a hole in the top, and pour this in and mix it with the contents.

Suet.—All crusts depend a great deal upon the quality of the suet; and for the purposes of making

suet puddings, there is nothing so good as the hard beef-suet that surrounds the kidney. Indeed, so valued is this particular part of the bullock for the purpose of making puddings, that at Christmas-time, when nearly every household in London and the country has a plum pudding, the price of suet has been known to run up to over a shilling per pound, even in the poorer neighbourhoods, thus giving a practical illustration that prices entirely depend upon the principles of supply and demand. The suet that is always to be found under the ordinary sirloin of beef is the same suet that we have mentioned as kidney-suet.

Suet requires chopping, and this, to a certain extent, is an art. Very often a novice will find that the suet is apt to stick to the knife, and the whole go into a clammy mass, especially if the weather is warm. This is easily obviated by mixing a little flour, which keeps the knife and suet dry. After chopping the suet, it is always advisable to put it into a basin, and by shaking the basin the larger lumps will come to the top. These should be removed and re-chopped, as we all know by experience how unpleasant it is to find lumps of yellow fat in the middle of a pudding. In chopping any material, it is always as well to bear in mind the importance of keeping it dry. Now it is very common in some kinds of sweets to be obliged to chop lemon-peel, and this has a very great tendency to stick. Flour will be out of the question when lemon-peel has to be used for some purposes, but a very good substitute for flour will be found in adding instead a little finely powdered sugar. We cannot recall a single case in which lemon-peel is chopped for any purpose where either flour or sugar may not be added; consequently, by using powdered sugar to keep the pieces of lemon-peel dry, instead of flour, you will be able to chop up the lemon-peel as finely as you like.

The interior of meat puddings is very similar to the interior of meat pies. A great deal of the goodness of both depends upon the quality of the gravy added. In making an ordinary beef-steak pudding, if you have by you some really good rich gravy, and pour this into the pudding, the result is very superior to what would be obtained if we simply added, as is often done, ordinary water.

There are many other things that tend to improve a meat pudding besides good gravy. We may mention a nice black mushroom, a sheep's kidney, a few fresh oysters with their liquor, or the contents of a small tin of oysters.

In France very delicious puddings are made by adding to ordinary steak some small birds. Every kind of small bird can be used for the purpose; and when people live in the country, especially where

there are boys in the family, who always naturally take a delight in catching birds, a really first-class dish can be made by adding a dozen sparrows, after they have been plucked and drawn, to a pudding made of a pound or more of steak, with a little good gravy, and a pinch of the aromatic herbs we have described; you will scarcely be able to tell the difference between it and a first-class lark pudding. In fact, very often the birds sold as larks are not larks at all. Larks, it must be remembered, are game; and a high-bred pointer will often cause some amusement, when out partridge-shooting, by making a dead point at a lark. It only shows what marvellous powers of scent these dogs possess.

Snipe Pudding.—This is what may be termed a high-class pudding. The beef-steak is mixed with the snipes, which are stewed in claret, to which has been added some garlic and some lightly fried Spanish onion. Thyme is also added, as well as some very rich brown gravy. This pudding is more often met with at public dinners than in private houses; and it is necessary to serve the pudding in the basin in which it is boiled. Of course, this is only done where the joints and dishes generally are not put on the table; for, naturally, there is a strong objection against serving any pudding in the basin itself, even when wrapped round with a white napkin.

A great many of these customs depend upon habit, and are nothing more nor less than prejudices. Customs must of necessity gradually change. At the time when "Pickwick" was written, it was thought the height of vulgarity to smoke in the streets; so was it to eat asparagus with the fingers, and to have a black bottle on the table. A man now can enjoy a cigarette after dinner, dispense with forks while eating asparagus, and sip a few glasses out of a black bottle stationed on his right hand and labelled *Château margaux*. He, however, would be a bold man who would place on the table a beef-steak pudding, even when mixed with snipe, in the basin itself. What would be said were he, in the midst of refined society, to wash this dish down with a little stout, served in what Dick Swiveller used to call "its native pewter"? We do not refer to the refined silver tankard with a glass bottom, but to the sometime battered article, "the weapon of many a fray," the quart pot of every-day low life.

But we must return to our puddings. All beef-steak puddings are improved by the addition of a little pinch of thyme. If the gravy has been flavoured with onion and other vegetables, this is all that would be required; but if in making a pudding you have to add plain water, it is advisable to throw in a little chopped parsley, a small piece of finely chopped onion, and in every case pray do not forget a spoonful of black pepper.

MENDING.

A good housewife is always a good mender. To be able to mend well is an accomplishment which is most valuable in household management, because it is so great an aid to economy, and also to neatness. A skilful mender saves pounds in the year, simply by lengthening the wear of garments. The most costly garment is a failure if a stitch is wanted here and there upon it; yet quick eyes, deft fingers, and proper materials, are needed if these stitches are always to be supplied.

Promptitude.—The great secret of keeping the contents of a wardrobe in good repair is to mend what ought to be mended *at once*. No one is better able to testify to the truth of the homely proverb, "A stitch in time saves nine," than is the mother of a family. Prompt attention to repairs saves many stitches and much expense. To make garments well in the beginning saves mending; and to mend garments well and quickly, as soon as they require it, makes them last.

Regularity.—In order to keep clothes in good condition, it is an excellent plan to set a special day apart for the business. Usually, the day fixed is the day after the clothes come from the wash. This gives time for them to be thoroughly aired, then examined; and if at this stage all loose buttons, missing tapes, broken button-holes, thin places, and holes which need to be patched, are put to rights before the garments are laid away, much labour will be saved. Mending after washing, however, is not sufficient. The one stitch which will save nine is usually put in before the wash, not after it. If all rents, tears, and holes were run together before the wash, they would be saved from "going further"—a catastrophe which leads to endless toil, but which is well known to every housewife. Weak places need not necessarily be properly finished before being washed, however—because to mend dirty garments is not an agreeable business—but they should be "caught up" or run together; and minutes spent in doing this before a wash will save hours afterwards.

Responsibility.—If the contents of the wardrobe are to be kept in good order, not only must a time be set apart for attending to repairs, but one person must be made responsible for the work. Of course, the responsibility may be divided; and, indeed, where there is a family, it is scarcely fair that it should rest entirely on the shoulders of one individual only. Mending, though necessary work, is rather dreary and uninteresting. There is a sense of satisfaction, arising from the consciousness of “something accomplished, something done,” connected with making clothing, which does not belong to mending; and therefore, when it can be avoided, no one person ought to be expected to undertake it. The burdens of family life are lightened when they are shared; and mending for the family is decidedly one of these burdens. Still, the responsibility must be placed somewhere, or the mending will never be done. What is everybody’s business is nobody’s business, and it is in human nature to try to shirk what is not agreeable. Where there are daughters belonging to the household, it is a good plan to make each one responsible for her own belongings, and for a portion of the household linen also. This would lighten the labour considerably for the mother, and it would be good experience for the daughters.

Many mothers, from a desire to save young people from disagreeables, uncomplainingly perform duties of this kind; but the kindness is very mistaken. It not only deprives a girl of experience which would be most useful to her in after-life, but it tends to make her selfish. It is sometimes said that women of the present generation can do a great many things, but they cannot sew. This is a great misfortune, and it rests with the mothers of the day to cure it. To undertake a portion of the family mending furnishes a simple and ready means of acquiring skill which every woman ought to possess. Mothers who do not trouble to teach their daughters to sew would do well to remember the words of Lady Mary Wortley Montagu, written more than a hundred and fifty years ago:—“I think it is as scandalous for a woman not to know how to use a needle as for a man not to know how to use a sword.”

In households where the mother has realised how easily work may be done when it is divided and shared, it is not at all uncommon for boys as well as girls to be trained to use the needle in small repairs. The plan is greatly scorned in some quarters, but it is a very good one notwithstanding. A boy is never the worse off because he is able to sew on his buttons, or neatly mend his own garments. There is many a youth climbing the mast, wandering in foreign climes, living in chambers or lodgings far away from home, who has felt it to be a great advantage that he was able to sew on buttons and

repair small rents without feeling that “all his fingers were thumbs.”

To mend well, something more is required than simply to know how to sew. There are numbers of good sewers, who enjoy the reputation of being very skilful with their needles, who are yet no hands at mending, and who cannot be trusted to make difficult repairs without bungling over the business. The explanation of this curious fact is that anyone can be taught to sew, but to mend well calls for the exercise of that most uncommon quality, common-sense. No amount of education will give common-sense to those who are born without it; and therefore when we see garments neatly and suitably mended, we may be quite sure that the individual who has had them in charge possesses both industry and capacity.

Patching Material.—It is a most important detail in all mending, but one which is too frequently disregarded by careless workers, that a garment should be repaired with material similar in kind, colour, and quality to that of which it is made. Thus, linen should be mended with linen; cotton with cotton; woollen with woollen; old calico with old calico; dresses and trousers with a piece of the same stuff of which they are made, and so on. When this rule is not observed, time spent in mending is pretty well wasted. To patch old calico with new calico, for example, is simply to make arrangements for a new rent. The strength of the new fabric is certain to act as a strain upon the old one, and to cause it to give way. For mending purposes, it is an economy when about to make dresses to buy a little more material than is needed for the moment, so that it shall be ready for mending.

When about to repair holes in linen or calico garments, or house-linen, it should be remembered that a patch is always to be preferred to a darn. It wears longer, and if neatly finished it looks better. In patching, the chief difficulty is the fixing; if this is cleverly managed, the patch will be a success. To patch well, baste a square piece of the same material on the garment which is to be mended, and be very particular to fix it evenly by a thread, and to make the selvage of the patch lie parallel with the selvage of the fabric. When patches do not lie flat, but look puckered and untidy, it is usually because this detail has been neglected. The seam should be on the right side; the turnings-in on the wrong side. Flannel patches should not be turned in at all; they should be herring-boned on both sides. If the part to be mended is near a seam, the seam should be opened and made to form one side of the patch. If the fabric to be patched is made in a pattern or marked with a figure, the patch should be

made to fit the pattern. Dress material should not be turned under on the wrong side, as this would make it bulgy. We have to remember that one of the signs of good mending is to manage matters so that the mend shall not be noticeable. If, however, the continuation of the pattern were broken, or if the sides of a patch dragged or looked thick, the mend would be quite striking. One way to make a mend unnoticeable is to damp it and press it with a hot iron after repairing it neatly.

When the material to be patched is very heavy (like cloth), or the edges are liable to fray, the patch should be placed flat, and sewn neatly on the right side; then the raw edges can be darned down or overcast on the wrong side. It is, however, scarcely safe to lay down any fixed rule about mending dress fabrics. A tear in material of this kind should be repaired according to its position and quality, as common-sense suggests.

A tear that is ragged and jagged at the edges, and which has to be darned, should always have a piece of the same material laid under it, to strengthen it, before it is darned. By this means a hole in the elbow of the sleeve of a dress—always a very awkward place to mend—may be made to look quite neat. The back seam of the sleeve should be opened, the piece which is to be used for strength should be laid between the lining and the fabric, and it should be large enough for the edge to turn in with the turning-in of the sleeve. The seam should then be stitched down as at first, and the two materials darned neatly together. It is, however, worth remembering that much labour may be saved in mending children's clothes if the knees and seats of boys' trousers and the elbows of girls' dresses be made of double material in the first instance.

Ravellings of the material are always best for darning woollen and fancy fabrics and for dress goods; and on no account should cotton or wool of a different colour, or even of a different shade, be used. The aim should be to have the darning material as much as possible like the fabric to be darned, to let it be soft and flexible, and to employ for the work as fine a needle as will carry it easily. Bad sewers invariably use coarse needles and thread.

When garments become worn in the part where the sleeve is set in, the sleeve should be taken out entirely, a patch put neatly into the material, and the sleeve sewn in again to the patch. If underclothing, such as nightgowns, chemises, and combination garments, were invariably fitted with sleeve-linings when they were being made, the necessity for this difficult piece of mending would not arise as often as it now does.

When waist-bands and the ends of collars break

off, or have their buttonholes torn open, it is best to put a new band or a new collar, with new buttons and buttonholes. The wear of garments can usually be lengthened very considerably by the adoption of this method, and also by making the ends of bands very strong.

Darning.—This is a very important part of mending, and it is one with which housewives who have to study economy are only too familiar as applied to stockings and socks. Articles of this description are, indeed, often made quite uncomfortable through being darned till they are thick. Housekeepers who can knit are fortunate in that they are able to cut off the worn feet of stockings and put in new ones, and thus save themselves hours of darning. New heels, also, can be put into old stockings; and if heels, toes, and knees are made double, they last very much longer than they otherwise would do.

Before beginning to darn, it is well always to consider the position of the part needing repair. If it is in a place where there is much strain upon it, the aim must be to impart strength; and this will best be done by darning a large surface and covering the weak place entirely, putting the needle in slantwise, so as to make diagonal lines. Darns intended to give strength should never be quite straight at the ends, because, if they are, the strain of the darn will rest on one thread, and will speedily drag away at the sides.

If the part needing repair is where it will be seen, it should be darned before it has time to get into a hole, in what is known as Swiss or web darning, which is an imitation of the original stitch. When darning of this sort has to be done, the thread should be rather finer than the original thread. The stitches should be worked in from left to right, and each loop should be pierced by the needle twice, following the line of the stitch. Clever darners can even put in a patch in imitation of knitting where a hole was before; but it is scarcely possible to describe in words how this should be done. Where there is a hole it is not difficult, by keeping in straight lines and working from right to left, to put a stitch over every stitch; and this business may be so neatly executed that it will scarcely show at all. Knitted goods of various kinds, such as shawls, vests, knickerbockers, and jerseys, can be most satisfactorily mended thus. The "Darning Weaver" sold by most drapers will be found by many a great help both as regards time and workmanship.

When a hole has formed in a part not exposed to view, the darn should form a sort of latticed surface to cover it entirely; and a considerable portion of the material round the edge of the

hole should be darned. The darning material, also, should never be drawn tightly, and loops thereof should be left at the ends each time the needle is drawn out, because the darning is sure to come together with wear and in the wash, and unless there is allowance made for this, an uncomfortable pucker will be produced.

Toes and heels of stockings are sometimes darned upon a china egg. In other parts, however, a flatter darn is made by putting the hand only, or a piece of cardboard, under the fabric.

Holes in stockings and socks should always be drawn together before being darned, so as to close the hole as much as possible by placing the threads in their original position. They must not, however, be puckered or contracted at all, but simply "laced" with very fine cotton of a different colour to the stocking itself, which cotton can be picked out when the stocking is darned. After lacing up a hole thus, it is very important that the darning-needle should go through the loops previously held by the cotton, to prevent their slipping away. The broken threads, also, that are left in a hole which is to be darned, should be drawn straight, but should never be cut away, as they are needed to fill up the hole.

A "Jacob's ladder" in a stocking is best mended with a crochet-hook. This imperfection is caused by the breaking of one stitch, which gradually drops bar after bar until it forms a veritable ladder of threads. To mend it, insert a small hook in the loop, draw the ring above through it, then the ring above that, and so on, until each bar has been picked up and drawn through. The last loop can be fastened with a needle. The great thing in a "Jacob's ladder" is to mend it as speedily as possible after the stitch is known to be broken. If a crochet-hook is not available, the business may be done with a needle or pin.

A cross-way tear, *AB* (Fig. 1), in a dress fabric is very difficult to darn neatly, and it often looks puckered when finished, even though great pains have been bestowed upon it, because it has been darned improperly. A defect of this description ought not to be darned in and across the line of the tear; if so, the darn also lies crosswise, and the material will drag and will not lie flat. It ought to be mended in the lines of the threads of the material, and the surface darned should be sufficiently large for double darning to cover the rent. (See illustration.)

It has been said that the material used in darning should resemble as nearly as possible the fabric to be darned. Thus wool must be used for woollen, and cotton for cotton goods. An exception to this rule occurs when Lisle thread or fine merino stockings have to be darned. Filoselle (not the sort bought for embroidery, but large skeins) is the best thing which can be taken. This filoselle can be split. Four threads will be sufficiently thick, and sometimes two will be enough.

Patching Stockings.—Thrifty housewives who do not knit, and who consequently cannot re-foot or make new heels for stockings, occasionally avoid over-much darning by making new heels and new toes from old hose. This method undoubtedly

lengthens the wear of stockings; but it needs to be very carefully done, or the joinings make a ridge in the stocking which causes pain to tender feet. The following suggestions for mending stockings in this way have been given by an adept in the homely art of patching:—

"Given a dozen pairs of woollen ribbed socks. Select from them the two or three pairs most worn; cut away the heels and toes, and lay by the better parts for use in mending—that is, for patches.

"From the best hose retained to be repaired, cut

out the worn heel, and from the patches cut a new heel precisely like the old one.

"First sew the bottom of the heel; then sew it into the place made vacant. Use soft cotton or else the fine soft mending yarn which is bought in all colours on spools.

"Sew the raw edges over and over, about as close as a nice overcast; so that when this new heel is worn out you have only to pull the thread and insert another.

"The threads must not be so tight but that the seam will flatten, and become imperceptible. To sew in such a heel will require about one minute.

"If the toe is worn so that the new darns seem to take from the old, and the rent made is worse, cut it off as far towards the instep as it is thin.

"From the top of one of the socks put aside, cut a new toe like the old. Sew across the end and then around the foot, observing to make the seam, as before, flat and soft."

Housewives who have to do much mending would

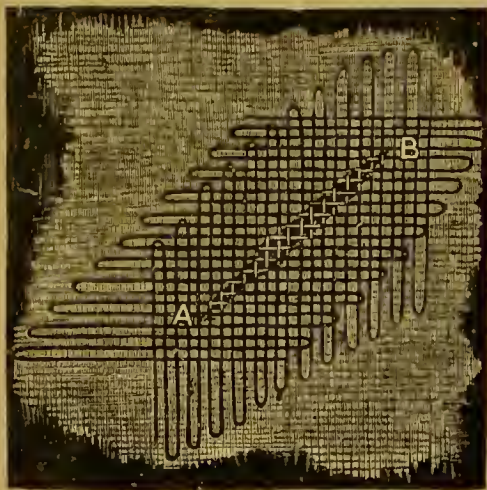


Fig. 1.—DARNING A CROSSWAY TEAR.

find it an advantage to provide themselves with a *Darning Bag*, which they could use as a receptacle for all socks and stockings as they are brought in from the wash. A bag of this sort could be made of cretonne or of ordinary print; a yard and a half of material would be required for it. To make it, cut off a yard and a quarter of print, and hem at both ends. Gather each side; and sew around a piece of pasteboard cut and covered with the cretonne in the manner shown in the illustration. A half-dozen little brass rings should then be sewn to each end of the cretonne, and a silk cord run through, by means of which the bag can be hung. If liked, the pasteboard on one side may be double, and between the sides folds of white flannel may be put, of the same shape as the pasteboard, to receive darning-needles. The other side of pasteboard may have a loose lining of cretonne, with narrow elastic run through the top, to make a bag within the bag for the reception of darning-cottons. (Fig. 2.)

Gloves.—A tear in the kid portion of kid gloves is best mended by working button-hole stitches in thin silk twist around the edges, and then drawing them neatly together. Holes caused by the breaking of stitches should, of course, be sewn on the wrong side with silk of the same colour as the glove. A split in black gloves may often be rendered imperceptible by having a little piece of Court plaster placed inside.

Buttons.—When replacing the lost buttons of garments, it is very important that the new buttons should be of the same size as the old ones. Careless menders pay no attention to this trifling detail; and the consequence is that buttons which are too small will not remain fastened, and those which are too large tear the button-holes. A button-box for storing reserve buttons should find a place in every mending-basket. In this receptacle should be put all buttons which have been ripped off old garments, as well as any complete sets of buttons there may be. Housekeepers who pick up and put away in its allotted place every button which falls into their hands, may save themselves many purchases and many journeys to the draper's shop.

The Mending of Household Linen is a very important part of the housewife's duties, because when linen is well looked after, and kept in thorough

repair, its time of usefulness is considerably lengthened. When sheets begin to show signs of wear by growing thin down the middle, they should be cut in two, and turned sides to middle. The selvages should be sewn together, and the raw edges hemmed. This will make a seam in the middle of the sheet, but few housekeepers will object to this. Sheets that are fine and costly are often made to last longer by being turned ends to middle, as well as sides to middle, or the thin portions are lined with old and soft material.

When blankets grow thin, they should be darned with worsted of a similar colour. Old blankets are valuable to the last fragment. When thin, they can be used as under-blankets; and when they will not hold together, even for a purpose of this kind, they can be cut up for floor-cloths.

Table-cloths usually wear, in the first instance, in the middle, where the two folds cross. If a table-cloth is of fine damask, it is occasionally worth while to put in a place like this a centre, cut from an old napkin, and to darn down the edges without turning them. It is easy to arrange that the patch shall be covered by the table decorations. If a cloth is too old to be patched thus, it may be cut up to make tray-cloths or smaller table-cloths. Housekeepers will not need to be reminded that old linen should

always be preserved, and kept in a place easy of access, to be used in case of accident for binding wounds or sores.

Quilts and toilet-covers are usually mended by darning; and good linen towels are frequently patched with pieces of old ones. When too old to mend, they make excellent housemaid's cloths. Old pillow-slips also can be converted into dust-bags for covering curtains that are folded, to preserve them from dust while a room is being swept.

Before the season's garments are laid away, they should, by all means, be put in thorough repair: that is, if it is likely they will be worn again. When, owing to change of weather, warm or light garments are brought out in a hurry, it is always a disappointment to find that they need mending. For want of a few stitches many a garment has been discarded which might have been employed to do good service. As an authority in affairs of the wardrobe has said, "If a woman who takes out in a hurry a garment which has been stored away, finds that it is not in wearing condition, she will do one of three things:— Either she will sit down and mend it, which pro-

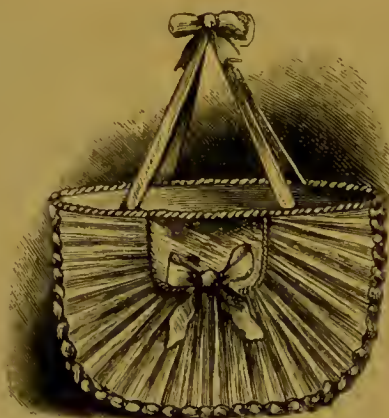


Fig. 2.—DARNING BAG.

ceeding will consume time which should have been devoted to other work or was designed for pleasure; or she will wear it shabby and feel ashamed, and thus miss that feeling of 'inward peace' which the

woman has who is conscious of being well dressed; or she will do without it and get cold or over-heated. In all these cases, disagreeable results are likely to follow."

BOXES, TRUNKS, AND PORTMANTEAUS.

Boxes, bags, and trunks are important articles, and require choosing with some thought and care. All trunks and boxes have become much cheaper of late years, with the exception of the solid leather portmanteau.

The boxes of a household generally grow with its growth in number and importance, and are never all bought at once. When husband and wife first start in life, the man usually brings to the common stock a portmanteau or two, and perhaps a "Gladstone" and a hat-box. The wife will have the travelling-box or boxes which her mother packed for her to take away on the honeymoon journey, and probably one or two larger and plainer ones, in which her clothes and other belongings were sent to her new home. These suffice for many years, and come in for the boys and girls to take with them when they go to school; but at the end of that period they are considerably knocked about. When a boy starts in life, it is very desirable, if he has to go about much, that he should carry with him the luggage of a gentleman; and, unless money is plentiful with his parents, a godfather or grandfather, or kind old aunt, can scarcely give young Hopeful a more acceptable present than a nice portmanteau and hat-box. In the same way with a girl when she leaves school. If she goes out at all on visits, she wants a nice box or two, with compartments, so that she may not be burdened with small packages, bonnet-boxes, and other annoyances; though if she is fortunate enough to have a nice dressing-bag of her own, she will do well to follow the example set by the young Princesses of Wales, and always carry it in her own hand, thereby making sure that she is never without her personal conveniences.

In making visits, the ordinary middle-class woman who travels without a maid, and is indeed quite innocent of either desire or means for one, should be careful to proportion her luggage to the probable length of her visit. It looks very inconsistent and inconsiderate to go to a house for a week provided with a small caravan; and when going on a round of visits from one house to another, it is better to have two boxes of moderate size than one very large box, on account of the ease of carrying the smaller ones up and down staircases, while big ones too often

cause wall-paper to be knocked off or damaged. They are, moreover, beyond the strength of women-servants, and are not regarded with favour by even cabmen and railway-porters.

Wooden Boxes.—The ordinary strong wooden box with iron clamps at the corners and a good strong lock, which costs from 7s. 6d. to 15s., is in these days more often the property of the respectable servant, male or female, than of anyone else. The kind of lock is the best index to the value of the box, and for anyone's personal belongings it is always desirable to have a good one. This applies especially to servants. It is highly desirable that, going as they do from one house to another, and among strange companions, they should have a good and secure lock-up place for their own especial property—for the best winter dress that is not wanted in warm weather, for the little valuables and presents that few are without, and even for the small stock of money they may not care to keep in their pockets. These boxes are very suitable also as clothes-boxes for boys at school; they bear a great deal of rough usage, and answer every purpose. The school play-box is best of the same make, only smaller.

Dress-Trunks.—Most people are acquainted with the ordinary French trunk, and its imitations made in this country under that generic name. They are constructed of thin boards covered with black oil-cloth or American cloth, strengthened with metal corners; and the nails, being brass-headed, are ornamental. These boxes are usually fitted with light trays, and, with careful handling, remain respectable for a long time. Small ones, holding as much as many ladies require for a visit of one or two weeks, cost from 6s. to 20s.; and with a neatly made and easily put-on cover of rough Hessian or sacking, and a strong strap, are very useful to those who struggle to keep up appearances, and endeavour to make a little money go a long way.

More elaborate dress-trunks, and better deserving of the name, are more or less like Fig. 1, and made in very similar manner to those previously described—of wood, with arched lid, a small "calf-pen" for bonnets and hats, and a tray. They are

lined with paper or shiny holland; and the iron that strengthens them so effectually, and does not a little in keeping them together, is put not only at the corners, but all down the four angles where the boards join. They are covered with black American cloth, or sometimes with grey or brown canvas; but unless the bottom is strengthened with cross-bars, it has a tendency to drop out when the contents are heavy; and the lid, in like manner, requires two or three lengthway slats of wood under the arched part if it is to resist pressure and blows. Such trunks as these, if of serviceable quality, and 17 in. wide by 24 in. in length and height, cost about £1 16s. The largest size usually kept in stock is exactly a yard long, by 22 in. in width and 28 in. in height. The price of these, well made, is about £3 8s.

The genuine French or Belgian trunk—made abroad, and often brought over because such things are really of cheaper and stronger workmanship on the Continent—is made of wood, and has all desirable divisions and conveniences; is lined with paper, and painted black with a composition that does not readily wear off. It is heavy, and secured by at least two locks, in addition to a central hasp and padlock. Such a box costs on the spot something like 50 to 60 francs, and is well worth the money.

More elaborate French trunks of Parisian manufacture are strongly made of wood, much strengthened with bands of iron, covered with canvas, and containing many divisions. They look smart when new, respectable when old, and are extremely serviceable and convenient. Their great peculiarity is that they need not be all opened at once. The lower part, which often contains three movable slides or divisions—one lengthway and the others across—is fastened by a couple of locks; and the upper part, on which half the locks are secured, is really about a third of the entire trunk, and is fitted with a shallow tray, over which, in its turn, the arched lid fastens with a couple more locks. Such a trunk as this lasts almost for ever, but rarely costs less than 100 francs, or £5 of our money. It is a pity trunks thus constructed are not to be easily obtained in this country.

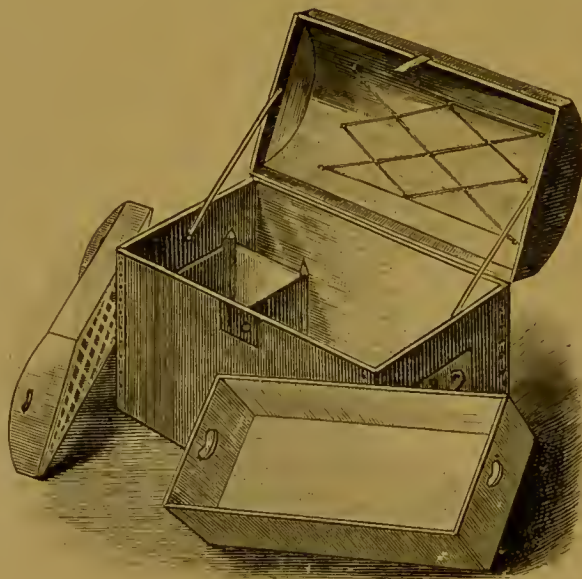


Fig. 1.—DRESS-TRUNK.

Dress-Baskets.—Dress-baskets for ladies have crept very much into fashion of late years, and have been greatly improved within the last decade. They are very nice for visits to watering-places and for Continental travel, as very little luggage is allowed each traveller, and every extra pound has to be paid for. The wicker-work is tolerably close, the bottom is strengthened with what are technically called wooden "battens," the whole is bound with leather, covered with tarpaulin or American cloth, lined with holland, and fitted with a tray, and one or a couple of locks, and fixed straps that go right underneath and round, and will not come off unless purposely wrenched off. There is thus no scurry at the last moment to find the straps, no lifting the well-packed basket to place those straps in position: and any lady with ordinary gumption and the use of her hands, can open or strap and fasten her own luggage at any moment without assistance. It must not be imagined, however, that a dress-basket is fit to be put into the hold of a steamer or sailing vessel, for it would most certainly be demolished. The ordinary dress-basket varies in size and price from 27 in. long by 19 in.

wide and 22 in. high, price £3 to £4; to 39 in. long, 24 in. wide, and 26 in. high, which is the largest size, and costs from £4 10s. to £6. These are prices from good medium quality to thoroughly good. More expensive ones are, however, sometimes made.

Ladies' Portmanteaus.—An admirable kind of portmanteau is often made in trunk shape, standing rather high and furnished with two trays—the under one deep and capable of containing two or three dresses, and the upper one shallow and divided into one lengthway space capable of taking a couple of parasols minus the long handles known as "husband-beaters" (supposing that the said long handles are not provided with a hinge and sheath for convenience of packing), and sundry smaller divisions, which are yet large enough to hold modern bonnets of the "Princess," "Alsatian bow," or *capote* shapes, and toque or turban hats, gloves, collars, cuffs, &c. The woman who indulges in large hats can never

hope to reduce her *impedimenta* into small compass; and if she treats herself to one, must either carry it on her head or be burdened with extra packages.

These trunk portmanteaus are never made very small, the smallest size being usually about 27 in. long by 25 in. deep and 19 in. wide. Such a one would cost about £12 in leather, or £7 10s. in canvas; and they go up to a yard long by 27 in. deep and 22 in. wide, at £15 in leather, and £10 in canvas.

Still better in most people's estimation is the double or wardrobe portmanteau (Fig. 2), which, whether made in leather or water-proof canvas, is strengthened with steel bands, has a tray and two divisions in one half, while the other is left unincumbered and generally lined with holland. By this arrangement one half may be packed or unpacked without interference with the other; and the cost of the small size, 27 in. long by 17 in. deep and wide, may be roughly stated as about £8 10s. in solid leather, and £5 in canvas; while for 36 in. by 20 in. each way the price will probably be from £11 to £12 in leather, to £6 in canvas.

Saratoga Trunks.—The kind of trunk dear to the American mind, and described so humorously by Mr. G. A. Sala, is the package *par excellence* of our Transatlantic cousins. All sorts and sizes of Saratogas are bundled out of the cars on to the "tracks" on the "other side"—but Saratogas they all are; and a lady recently returned declares that a visitor to the "springs" from New York for only four days had two enormous ones, but on unpacking them found that the "waists" of two of her dresses had been forgotten, and wired for another Saratoga to be sent on containing them. This big compendium is a wooden box in the first place, supposed to be devoted to dresses. The upper part is a deep and commodious tray divided into compartments, most of

which are fitted with lids. They are protected by battens up the sides and right over the lids, and have good strong locks. They are quite the trunks for long distances, ocean passages, and big hotels, but even one of them would block up many an ordinary English bedroom; and considering how small is the stowage-room in many households, it is all but impossible to put them out of the way.

Gentlemen's Portmanteaus.—The ordinary gentleman's portmanteau is often called a "turn-over," the two halves being of equal sizes. These

are too well known to need description, and they are especially adapted for railway travelling. The very best are made of the same leather as the soles of good boots, and riveted with copper, and have locks of good quality and tumbler construction. The lengths vary from 24 in. to 30 in., the widths from 15 in. to 17 in., and the depth is almost always 9 in., which admits of the portmanteau being placed

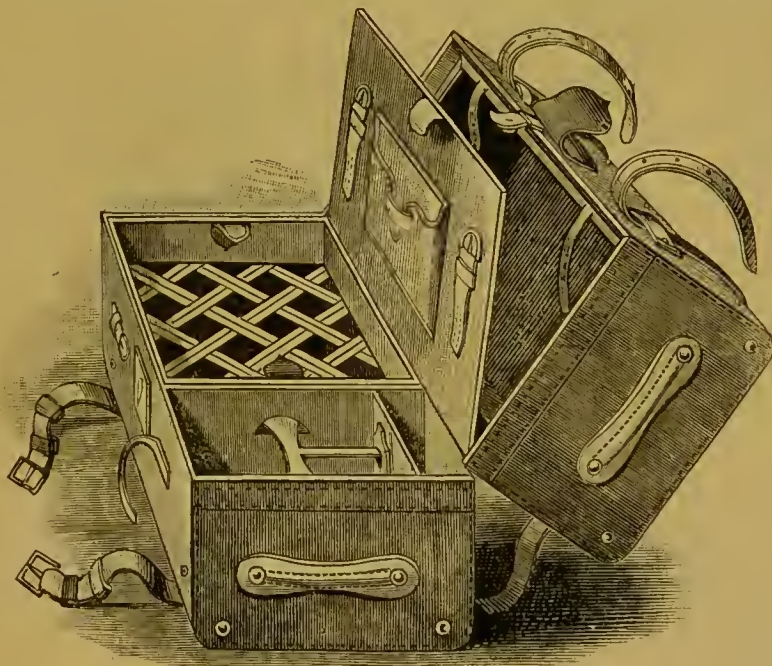


Fig. 2.—LADIES' DOUBLE PORTMANTEAU.

under the seat of the carriage. The prices are—roughly speaking—from £4 to £8 in leather; and a small one may be got at almost any price in American cloth; but the best is the cheapest.

Larger portmanteaus are often made with a hat-case inside and divisions for boots, so that these do not interfere with linen or cloth clothes. They vary in price from £10 to £12 in leather, but can be had in good substantial quality and size in canvas for £4.

Then there are the Duplex portmanteaus, each side of which is fitted with a lidded tray, "railways" pure and simple costing from £3 10s. to £4 15s., or a little less or more according to quality; also portmanteaus with "gusset" tops that are capable of containing little or much in the shape of extras, but part and parcel of the portmanteau, and fastened to it by continuations of the same straps that secure the lower part; and almost every maker has his own patents, comprising special conveniences.

Overland Cabin Trunks, &c.—The regulation size for overland trunks is 36 in. long, 15 in. wide, and 14 in. deep, and extremely good ones are made at £3 15s. each. Trays may be had for them at 5s. each extra. The same make is to be had in smaller sizes, but these "regulation" dimensions are recognised all the world over. They are sometimes made with metallic linings, and are to be had in very solid leather at higher prices.

A lady's Dress Imperial, made of strong waterproofed stuff, with a steel frame, is specially adapted for knocking about, and made with a view to the requirements of wanderers, and those who, from choice or inclination, roam all over the world. It is eminently adapted for carrying dresses, and it may be said dresses alone, as a tray is the only adjunct to the interior. These cost from £8 to £12 each in best quality, and from £4 10s. to £8 in commoner canvas; the lengths vary from 30 in. to 39 in., and the widths and heights are in proportion.

Under-berth or cabin trunks are very inexpensive, and, as a rule, slight. None are less than 18 in.

nor more than 20 in. wide, the depths are 11 in. and 12 in., and the lengths vary from 24 in. to 36 in. They are made of wood, covered with American cloth, and lined with paper, and the prices run from 9s. 6d. to 18s. 6d. each.

Steamer trunks have flat lids, and are made of strong wood covered with black waterproof, and have iron handles in front and at either end. They are protected with battens placed outside, riveted on and secured to the box at each end by iron clamps or corner bands. They have good stout locks, and are very substantial, cheap as they are. On board "troopers" cabin trunks must have "sunk" handles and move on rollers. The smallest size ordinarily kept is 24 in. long by 18 in. wide and 11 in. deep, and it costs 9s. 6d. None are deeper than 20 in. nor wider than 12 in., but the longest measure a yard, and cost 12s. 6d. Most houses make to order in a few hours, sizes that they do not keep, and rough packing-boxes for the hold are often wanted

and very rapidly made. Special cabin leather bags vary from £2 to £2 8s., according as they measure 20 in. or 24 in.

Iron Boxes.—These useful articles are supposed to have originated in the North of England, or, at all events, in Lancashire, and on their first introduction were heartily welcomed by most people, on the hypothesis that they did not harbour or convey insect pests from house to house, nor even pick them up in luggage-vans. They are light, durable, watertight, and cheap, and can now be had at every ironmonger's. In the commoner kinds the bottoms have

a tendency to come out, and the beadings get loose and catch the belongings of the unwary. A great many have rounded tops and bottoms, and are japanned oak outside and blue inside; but with very much knocking about the blue coating cracks off, and any of the contents touching the bare iron are liable to rust, and after a time to iron-mould. From 12s. 6d. to 30s., according to size, is the cost of this sort of box.

Another kind of box is flat-lidded and

oblong, and a purplish-black inside and out. These, when wanted for India or any other hot climate, are often padded with leather or india-rubber, so as to make them air-tight, and then are most valuable for dresses and millinery. These boxes are popularly supposed to be impervious to moths and ants, and really are so, as long as there are no holes in them. Certain regulation sizes are used by officers as uniform-cases. They are seldom made more than 14 in. wide or 11 in. deep; but those that are 40 in. and 43 in. long take dress-skirts and mantles beautifully. In these sizes they cost from £2 to £2 15s. each, though smaller ones are cheaper. There are none worth having under a guinea.

Some iron boxes of very first-class quality, such as Fig. 3, are made with arched lids, trays, and handles, and strong iron supports outside, securing the bottom to the sides, and having sliding rods and bolts, which relieve the lock from the strain to which it is subject

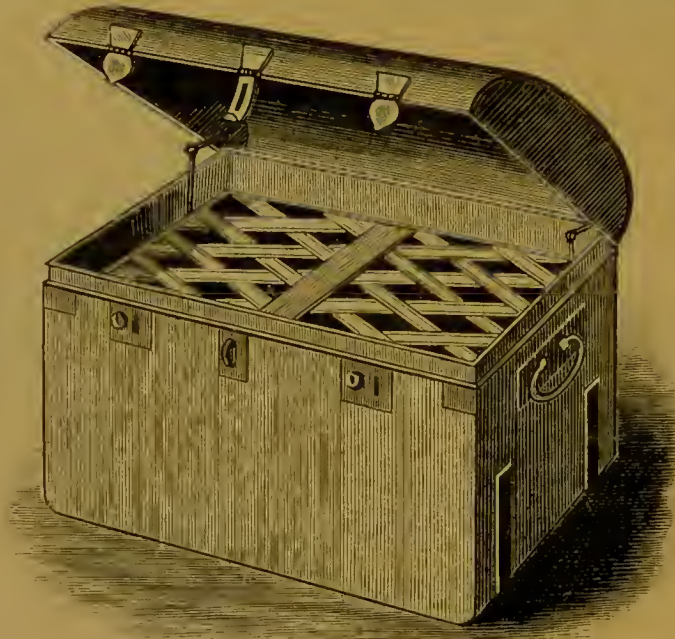


Fig. 3.—IRON BOX WITH TRAYS.

if there is no other fastening. Some, also, have hasps and padlocks as well as or instead of locks. The prices of such boxes as these vary from 23s. to 52s. each, the smallest size being 18 in. and the largest 30 in. long, while heights and widths are in proportion.

Travelling-Baths.—The difficulties of travelling with a family of small children have been much reduced by the introduction of tin baths fitted with lids (Fig. 4), straps, and locks, in order that the "tub" may also do duty as a box. Some of them have, however, one disadvantage. In spite of strap and lock, the lid has a tendency to shift while in process of handling by porters; and stray small articles, pushed in perhaps at the last moment, are liable to drop out, much to the annoyance of the owners and beholders. In others this is prevented by catches for the lid at each end. The latest improvement is a wicker basket fitting the inside of the bath, which can be lifted out bodily with its contents, so that the bath may be used and yet not regularly unpacked. These baths are made in two qualities, best and second-best, and have metal loops attached to them, through which the strap is passed. Now that so many houses are fitted with bath-rooms, there is less demand for large than for small sizes. They begin at 26 in. across, and go on to 38 in., the former in good quality being 28s. to 30s., and the latter 40s. to 45s. each. Those of inferior quality range from 18s. to 29s. Wicker baskets for the inside cost from 4s. 6d. to 7s. 6d. each.

Basket Ottomans.—Strong wickerwork oblong basket ottomans have often been recommended, lined inside with holland, and furnished outside with chintz "petticoats" and padded tops, like other ottomans. By having strong crash coverings with strings, made to tie on and enclose the whole, these can be packed and utilised as travelling-boxes for ordinary journeys; and on arrival they serve the same useful purpose as they do at home. Officers' wives, who lead a roving existence, are often in the habit of carrying about sofa-blankets, cushions, skin rugs, antimacassars, &c., in receptacles of this kind, as the ottoman forms a comfortable addition to the rooms in furnished houses, lodgings, &c., with which they have to content themselves, and the contents

are soon placed on sofas and chairs, and give the familiar home-like touches that are alone possible under such circumstances.

Riding-Portmanteaus.—Ladies who hunt, or ride much on horseback, generally have a specially fitted portmanteau, which takes the hat, riding-habit, trousers, boots, &c., and every requisite, quite complete and separate from all other luggage. The price is about £6. It is also the orthodox thing to have a special box for a pair of riding-boots, with trees, brushes, and everything complete. A peculiarly comprehensive and well-fitted case of this sort has always formed an item in the marriage outfit of each of the Queen's daughters.

Hat-Boxes.—A man's hat-box or boxes may generally be counted amongst his cherished possessions. Very respectable ones, with strap and lock, may be obtained from 4s. 6d. to £1, it being of course very easy to give more. Better-shaped and stronger hat-boxes, with space round the hat for collars, neckties, &c., are made in basil leather, lined with jean or linen, from 18s. 6d. to 25s.; and when wanted to

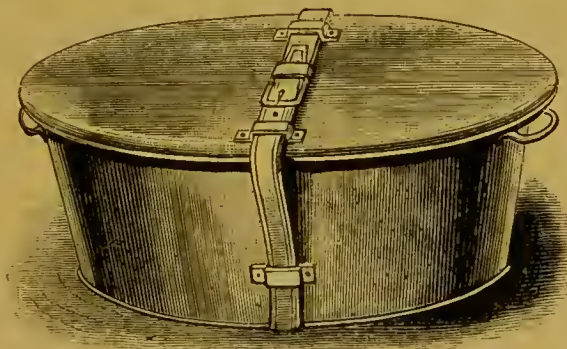


Fig. 4.—TRAVELLING-BATH.

hold two or three hats, the expense may be calculated as about £1 a hat. Square padded hat-boxes, to hold two, are made in waterproof canvas from £1 5s., and in leather from £1 16s. The fittings are removable, and then the case can be used as a small (a very small) portmanteau. Many a man, however, will start off on a two or three days' journey or absence, provided no "dress" is required, with only his hat-box, which is very convenient for sudden emergencies of this sort, though the handy small wide-mouthed bags lately introduced have greatly displaced the hat-box from use on such occasions.

Travelling-Bags.—Of these handy little convenient bags there is an immense variety, and it is continually being added to. Very many of the cheap good-looking bags found in our shops are imported from Germany, and are made rather for sale than for use. The best makers of cheap bags are the French, and theirs really do wear pretty well. But for thoroughness, ease of working, and quality of material, there is nothing like a first-class English article, which commands its price, and is well worth it.

The well-known "Gladstone" bag, which collapses into a mere nothing, but is capable of containing a vast amount, is made in many qualities, in black or brown cowhide or hogs skin, with one or sometimes two locks, and with two straps, one each side the handle. The lengths vary from 16 in. to 26 in.; and there are at least three fairly reliable qualities, the cheapest and smallest of which costs about 20s., and the largest and best £5 10s. These are for travelling; but made in Russia or Morocco leather, with ornamental metal finishings, they may be any price, and suitable for presentation or testimonial, or as a case for the robes, say, of a doctor of divinity or music, or of a mayor. A capital gentleman's bag that opens out square is made in four sizes—the first 18 in. and the largest 24 in. long; and this last size, which in good cowhide costs several pounds, is large enough to contain three suits of clothes, besides other necessaries. Very nice railway handbags, 18 in. long, in cowhide, without any outside pocket, are to be had for 25s., or with an outside pocket for £1 15s.; and the more ordinary kind of bag in good cowhide costs 18s. for one 14 in. by 10 in., or £2 3s. for one 26 in. by 20 in.; while in waterproof enamelled leather the same shapes are about 6s. and 22s. for similar sizes. A very respectable black bag, frequently called a clergyman's bag, 18 in. long, costs about 17s. to 30s. A good substantial shape is that ordinarily known as the "Kit" bag; and in brown cowhide, with brass lock and fastenings, the 18 in. bag is 30s., and the 20 in. is 45s. A bag to contain hunting-kit is fitted with a removable haize-lined tray at the bottom for the hunting-boots, and the price of one that meets all requirements is about £4 10s. The above are *English* prices; and very often good imported bags, very similar in appearance, may be had for much less, though the wearing qualities are somewhat uncertain. Ladies' bags of smaller sizes come under the head of "reticule-bags;" and, beautiful as is the quality of the best made in our own country, the German and French ones answer all purposes, and come more within the compass of middle-class means.

Dressing-Bags.—Of bags fitted with every requisite for the toilet, there is an immense variety both for ladies and gentlemen. Very often the brushes, bottles, scissors, and other implements, are fitted on to a central partition which can be entirely removed, leaving the empty bag available for other purposes. Sometimes they are all contained in one side of the bag, which shuts down with a spring so as to conceal the fittings, and leave the space on the other side clear to pack in. Another mode is to have a regular box of the ordinary dressing-case kind containing the fittings, and a leather bag on the top

of it, so that the clothes, &c., are effectually separated from the toilet requisites. Perhaps the smallest and most complete thing of the kind ever made was that which the Duchess of Fife (Princess Louise of Wales) took with her on her short wedding-journey. It was quite a small oblong upstanding bag, that any lady could carry in her hand without being overweighted. Inside, every inch of space was made the most of; the bottles were at either end, and there were no more of them than absolutely necessary; the brushes, button-hook, shoe-horn, paper-knife, &c., were of useful size; there was a blotting-book, inkstand, and every implement for writing, as well as thimble, needles and thread, and everything that could be required for needlework. Tortoiseshell, which is very light, was largely employed. Everything, in fact, was done to reduce weight as well as bulk; and the owner of this *multum in parvo* really had only to open her bag, and all her little conveniences were at hand. We cannot all have gold and tortoiseshell, but there is no doubt that a most useful and moderate priced bag constructed on similar lines would have an immense sale.

A cheap fitted bag can be got for a guinea. A very good travelling dressing-bag, with plated mounts and wooden-backed brushes, may be had for either lady or gentleman for £3 3s. to £5 5s. With silver mounts and ivory-backed brushes, £5 5s. to £10 10s. are about the prices; and of course these range upwards according to quality. Gentlemen frequently have a Gladstone bag fitted with necessary toilet articles, and sometimes portmanteaus are so arranged.

Bonnet-Boxes.—For downright hard wear, and knocking about in railway vans, steamers, and station omnibuses, there is nothing like a good substantial tin or iron box, with lock and key, a handle at either end, a fixed strap, an oval top, and a tray if desired. They are usually made in four sizes—the 12-inch costing 6s., and the 16-inch 10s. 6d., while smaller sizes and lower prices are between the two. Very nice light bonnet-boxes that will on a push hold a good many other items, are made of wood covered with waterproof cloth and lined with printed cotton. Some of the better ones have divisions in the tray, and a little looking-glass fixed in the lid, good locks and a fixed strap. The smallest made in this quality are 13 in., and the price 17s.; but they are not made larger than 21 in., which costs 24s. Commoner ones are kept in smaller sizes—12 in., 14 in., and 16 in. respectively, the prices being from 6s. to 12s. At some places in London—not regular trunk-shops, but at drapers' and what may be called odds-and-ends shops—very compact bonnet-boxes may often be procured at most moderate prices, made of stout millboard covered with black American cloth and lined with

paper or cotton. For 7s. 6d. quite a large one can be had—that is, as large as this kind of box is made; and a very nice one for 4s. 6d. They are probably imported from Germany; and with a little care, such as always taking them in the railway carriage, instead of entrusting them to the tender mercies of the luggage van, they last for many years. The *carton* or paper band-box, however cunningly disguised, is very seldom seen in these days, but some milliners now send out their wares in very neat little wooden boxes that are quite allowable, with a strap round.

Despatch - Boxes.—Gentlemen who go about much, and always have to carry papers with them, are usually glad to supply themselves with a despatch-box of some description. Very good empty ones are to be had from about 24s. to £2 10s., useful though not elaborate. Old-fashioned tin despatch-boxes are very cheap, but a first-rate “fitted” tin one, suitable for hot climates, costs about £5. The ideal thing of the kind is fitted with every requisite for writing, down to the inkstand, so that wherever it is opened all materials for the transaction of business are at hand. These may be had from a guinea and a half, or in morocco leather, very handsome, yet perfectly neat, at about £8 8s.

Knapsacks.—These most useful receptacles for tourists or people who have to rough it in going about a colony, are now mostly made in checked mackintosh instead of the old-fashioned rough leather, and are very light and convenient. One side is fitted with canes, to enable it to ride easily on the shoulders of the bearer, and there is not only a good stout neck-strap, but one that serves as a handle, and has two leather rings attached to it, through which a stout stick or pole can be passed. At each end there are slipper pockets; and the whole thing in full size costs from 13s. 6d. to 18s. 6d. A very decent satchel and strap may be had from 2s. 6d. to 7s. 6d., though there are sundry sizes and qualities between.

Cyclists have all sorts of satchels and wallets specially made for them, chiefly in waterproofed canvas. The sizes and shapes adapted for all kinds of machines have been carefully studied by the

various makers, and these *multum in parvo* bags, as they are called, are furnished with all sorts of little flaps and pockets for odds and ends. Thus, even on a bicycle a young man may carry easily all he needs for several days; while on a tricycle or tandem a lady can manage very well, with the help of a little luggage sent on now and then by rail to provide fresh supplies. Usually cyclists, if on a serious tour, take both a bag, selected according to their needs, and also a piece of mackintosh as a hold-all, which is wrapped round loose garments or coats, and then strapped to the handle-bar of the machine. The latter form of package was, in fact, invented by them.

Hold-Alls.—These quite modern inventions will make up tidy parcels, not only of the rugs, waterproofs, and great-coats that are so essential in travelling, but take almost anything of a soft nature that may have been forgotten, and the umbrellas into the bargain. The “hold-all” is an oblong piece of canvas or waterproof with flaps on either side, each fitted with a strap, a deep strapped pocket at one end, and a stout handle and couple of straps outside. It is a kind of thing frequently made to order, and to suit special requirements, but can usually be found ready made in American cloth, with a pocket, but without flaps, as low as 10s. 6d., or with pocket and flaps, in tanned canvas, for a guinea, or in waterproof for £1 10s. Fig. 5 shows a

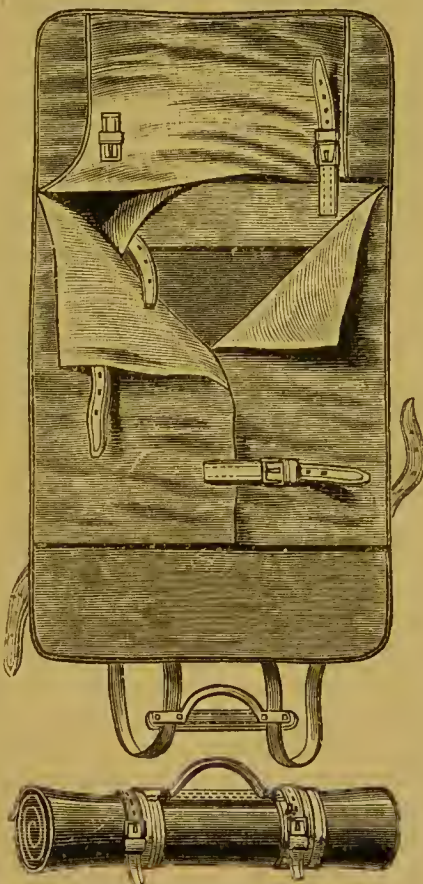


Fig. 5.—HOLD-ALL.

convenient and useful pattern.

Straps and Cords.—Of all the vexations ever devised for the torment of humanity, a box-cord is about the worst. It involves much turning over of heavy packages, some skill in catching its several parts together, and considerable strength in drawing tight and knotting. Then the undoing of those knots; how it breaks the nails, exercises the patience, and tries the temper! When these knots are very tortuous, pocket-knives and scissors are too often called into rash requisition, and the result is grief and vexation of spirit when the return journey is contemplated! The art of cording a box tightly used to be attained in perfection by the “boots” of an old-fashioned inn; but he is a kind of personago

who has been well-nigh improved out of existence, and the cording is an occupation almost gone. Straps are more convenient in every way, but they should always be secured to box or parcel; for if not, they are liable to vanish in transit, especially when the package is otherwise secured.

The expensive way of buying straps is to have them at the regular trunk-maker's; and the substantial and economical way is to go to a harness-maker's, or, in provincial parlance, "colly-maker's," and have a good strap cut to the required length and fitted with a buckle. The price will be from 1s. 6d. to 4s. 6d. Smaller straps, such as double ones, with handle between, for rugs, may be had at about 1s. each at many places, though they will cost at least double at a regular shop; and very nice little ones of similar make are sold for 6d.; while single ones are at similar prices, and very useful for light boxes. All such things as these must be carefully examined, as there may be a flaw in the leather, and then it is a case of "What can you expect to have at such a price?" But dozens of them have no such flaws, and are everything that ordinary

folks need. Swivel-straps are very useful, and some are made with a lock in the buckle. The American cloak-strap, which is tightened by winding up the double handle, and sold at 1s. in strong coloured webbing, is very handy for carrying, not only clothes and wraps, but all sorts of other articles. Many firms now supply their customers with handy little straps or handles whereby to carry parcels, and a few of these carefully treasured are most convenient at all sorts of unexpected times and places.

Luggage Labels.—Many portmanteaus, &c., are made with leather tablets, into which a card may be slipped; but there is nothing like the parchment or waxed linen label, with an eyelet-hole in one end and a bit of string to tie it on with. The adhesives sometimes wash off, and there are packages to which they will not adhere. The wise traveller will have some of both sorts; but those that tie on are the best, and are always coming in useful. Of late a very tough and thick paper has been introduced, almost like card, but far stronger. These are often known as Denison's Tag Labels, and are very cheap and useful.

DEATH AND BURIAL.

THE most skilful physician cannot prolong life indefinitely. Sooner or later death comes to every household; and as such an event brings with it certain responsibilities and duties of its own, which ought to be well known to those responsible for their performance, it may be well to treat the subject in this place, and before those notes on the treatment of disease which, for convenience of reference, will be better commenced in a fresh volume.

The Signs of Death.—It is often by no means easy to determine the exact moment at which life becomes extinct. That people have from time to time been buried alive is an undoubted fact, and this is especially apt to occur during epidemics of fever or cholera. Young women sometimes pass into a condition of catalepsy or trance which may readily be mistaken by the inexperienced for death. In exceptional instances people have apparently the curious faculty of temporarily suspending all the animal functions and assuming an inanimate condition. Of this St. Augustine gives an instance which occurred within his own knowledge:—"There was a certain presbyter of Restitutus, in a parish of the diocese of Calami, who when he pleased (and he was often asked to do it by those who wished to have ocular demonstration of the strange fact), just by having a

noise made like as of somebody crying, used to convey himself out of the influence of sensation, and lie like a corpse; so that not only was he insensible to people pinching and pricking him, but sometimes fire had been brought and he burnt with it without any sense of pain except from the wound afterwards. The body seemed to be motionless—not in consequence of any voluntary effort, but from want of sensation, as was made the more probable by the absence of any appearance of respiration, as in a dead body; yet people's voices, if they spoke out very clear, he said afterwards he could hear as if they were a long way off." Another well-authenticated case is that of Colonel Townsend, who had the power of arresting the heart's action at will. Curiously enough, he died a few hours after giving one of his exhibitions. The performances of the Dervishes are too well known to require detailed description.

Many years ago the Marquis d'Ourches placed at the disposal of the Academy of Sciences of Paris a prize of 20,000 francs, to be awarded "for the discovery of a simple and popular mode of recognising the signs of real death in a certain and indubitable manner, a method which may be put into practice by poor and uneducated villagers." Another prize of 5,000 francs was also offered "for the discovery of a scientific method of recognising with certainty the sign of actual death." The grand prize has

never been awarded, and is still open to competitors of all nations.

The evidence on which medical men usually rely when consulted in a doubtful case, may be summed up as follows :—

1. The heart has ceased beating. This can be determined only by a careful examination with the stethoscope, as the inability to feel the pulse at the wrist is of little value. A single examination may not be sufficient, and the doctor will perhaps require to listen every half-hour for some hours. There have been many cases of recovery and restoration to life even when the heart has apparently ceased beating for an hour or more. The possibility of catalepsy or hibernation cannot be ignored.

2. The breathing has ceased. Here, again, frequent examination with the stethoscope affords important evidence. The use of a looking-glass for condensing the breath, or of a feather held over the mouth for indicating the existence of a current of air, is practically of no value.

3. The loss of sensibility in the eye is often relied on, and may be of value when taken in conjunction with other signs. When a person is really dead, the pupil fails to contract when a ray of light is suddenly thrown on it.

4. Cooling of the body is generally considered characteristic of death, but sometimes the temperature rises to a marked degree for some hours after the action of the heart has ceased.

5. Bleeding is of some importance, for usually the blood ceases to flow when life is extinct.

6. The occurrence of rigidity is a more reliable sign, and the same may be said of the onset of decomposition.

It will be seen that, taken together, these various signs and tests, even short of the occurrence of decomposition, are sufficient for nearly all purposes, but certain cases have occurred in which the most careful examination has proved inconclusive or misleading. Each test discussed separately has been shown to be liable to errors of the grossest description. *Rigor mortis* may be counterfeited by simple rigidity, as in cataleptic conditions; and while it is sometimes conspicuously absent, it supervenes in other cases with lightning rapidity, as in the cases of soldiers who have preserved the attitude in which they were surprised by death. Temperature, again, is absolutely delusive, for, apart from the varying influence of the surrounding temperature and clothing, a post-mortem rise of temperature, persisting for several hours, is by no means uncommon, and cases have been recorded in which it was still above normal many hours after death. Even a marked fall in temperature is not conclusive, for in cholera and many wasting diseases it has been known to

fall as low as 90°, and even 83°, while life undoubtedly remained. The unreliableness of inferences drawn from the absence of respiratory and cardiac movements is well known.

Probably the best test is that afforded by the reaction of muscles to electricity. At a discussion which recently took place before one of the medical societies in London, it was pointed out that within twenty minutes of the heart ceasing to beat, a marked and steadily increasing loss of electrical reaction was noticeable. In the majority of instances all response to electrical currents was absent at the end of two hours; and although in the case of powerful men suddenly stricken down, the phenomena may persist somewhat longer than usual, they have never been detected three hours after death. Particular groups of muscles may resist stimulation even during life as the result of disease, but the condition never extends to the muscular system as a whole. This is a test which is readily applied by any medical man who has a battery, and may be of the greatest service in case of doubt.

When a medical opinion is not available, it is better, if any doubt exists, to postpone actual interment until decomposition has set in, and the signs are so distinct as not to admit of the possibility of a mistake being made. In the vast majority of cases there is no room for doubt, and the verdict of the medical attendant may be accepted without hesitation.

Before Death.—There are certain symptoms usually observed as death approaches, among the commonest being inability to swallow, coldness of the hands and feet, blueness of the nails, with restlessness, and twitching of the corners of the mouth. The forehead is covered with cold damp sweat, and the nose looks sharp and pointed. Sometimes patients retain food and nourishment until almost the last, but care should be taken not to worry a dying person. The hands and feet should be kept warm; and when no water has been passed for some hours, it may be a very great comfort to the sufferer if the doctor is requested to draw off the urine.

The sick-chamber should not be crowded with anxious relatives, and only one or two should be admitted at a time. If prayers are offered, they should be short and to the point. The last scenes are usually neither painful nor edifying, but, as Miss Nightingale rightly remarks, often “very commonplace affairs.” Much importance is attached to “last words,” but the utterances of the dying are rarely worth recording. There is usually no leave-taking, and the patient passes away quietly—in most cases without realising his condition, his last request being very

often for something to drink. It is never safe to ask a dying man if you shall pray for him, for his answer may be painfully, though unintentionally and unconsciously, irreverent. We are not here, of course, referring to cases where prayer may be specially desired, or required, or to the course of an illness, but to the circumstances of an ordinary and actual death-bed. Care should be taken to make sure that death has really occurred before asking the friends to leave the room; and in any case they should not be hurried from the bedside of their dead, but should be allowed a few minutes.

Dying Declarations.—When a person has been subjected to foul play, his dying declaration may be of the utmost importance. Dying declarations are under certain circumstances admitted as evidence, both according to English and Scotch law. It is admissible for a doctor to give evidence of a dying declaration, but more weight is attached to it when taken down in writing in the presence of witnesses. Should time allow, it is always safer to ensure the presence of a magistrate, or, at all events, of a legal functionary, to take the declaration. The essential point is, that the person at the time of making the declaration should believe himself to be dying. Should he apparently entertain the hope of recovery, such evidence is inadmissible. It is not sufficient if the person makes a declaration and *subsequently* abandons hope, and declares that he believes himself to be dying. In one case the escape of a criminal was attributed to the neglect of the medical attendant with reference to a dying declaration. The man had been grossly ill-treated, and died from the injuries received. On his death-bed he made certain statements implicating the prisoner, but it was not till *after* this statement had been made that he told his wife that he knew he should not recover. The surgeon had informed the wife that he could not live, but not in the presence, or in the hearing, of the dying man; and the prisoner, although undoubtedly guilty, was acquitted. The statement must be voluntarily uttered, and leading questions are not admissible. The identical words of the person must be taken down or reported, and no interpretation or paraphrase of them will be received as evidence. It is not sufficient that the patient says that he thinks that he is dying, but he must actually believe such to be the case.

Wills.—People often neglect to make their wills until it is almost too late. The attendance of a lawyer in cases of emergency is not necessary, and anyone may make the necessary arrangements for drawing up the will. A will must be in writing, or, at all events, partly written: and it will not do to

sign a printed form. It is not necessary that the document should be written on parchment, or with ink, for a sheet of paper and a common pencil will answer every purpose. Even when the will is lost, the evidence of witnesses as to its nature and contents may be acted upon by order of the Court, as in the notable case of Lord St. Leonard's will. The will should be signed at its foot or end by the testator, or by some other person in his presence, at his dictation, and by his direction. The testator may make a mark if unable to sign his name. Nothing written below the signature is of the slightest avail. Should there be more than one sheet, they should be fastened together, and each should be signed, or, at all events, initialled by the testator. Two or more witnesses must sign *at the same time*. No legacy to a witness is valid, but a legacy to a witness may be left in a codicil. All alterations in a will, or codicil, must be attested by initialling. The will should be read over to the testator before he affixes his signature. The hand of the testator must not be guided, and he should be allowed to sign, or make his mark, in his own way. When a will is drawn up at the last moment, it should be couched in the simplest possible language; and it is better to repeat names than to admit of the slightest ambiguity. The following has been suggested as a simple form of will:—

This is the last Will and Testament of me, John Smith, 10, Hill Street, London, in the County of Middlesex. I give and devise all my estate and effects, real and personal, of which I may die possessed, or be entitled to, unto..... absolutely; and I appoint executors of this my Will, and I hereby revoke all former Wills and codicils. Dated this the first day of January, One thousand eight hundred and eighty-nine.

Signed by the testator in the presence of
us, who thereupon signed our names JOHN SMITH.
in his and each other's presence.
WILLIAM BROWN, 10, Gower Street, London.
HENRY ROBERTS, 13, Oxford Street, London.

But a much simpler statement will answer every purpose in the case of property left to one legatee only. It would be quite sufficient to say, "I leave all my property to.....," and to sign it in the presence of two witnesses, who should at once, and in the testator's presence, and in the presence of each other, append their signatures.

After Death.—After death the eyes should be gently closed, the eyelids being, if necessary, kept in position by a coin. The body is usually washed, but in many cases this can be dispensed with advantageously. When the washing has been performed, the body is clothed in night-dress and stockings, and should be laid on a clean sheet placed over a piece of water-proof sheeting on the hard mattress. The feet should be fastened together with a piece of

broad tape, tied in a bow. The hair should be arranged and parted much as it was worn in life. In the case of a woman, the wedding-ring should not be touched, but the other rings may be removed. The body should be covered up to the neck with a clean white sheet, and a lady's handkerchief of delicate texture should be laid lightly over the face. The head of the bed should be raised by a piece of wood under the castors. The fire should be allowed to die out, and the window closed. The room should be tidied up, all articles of jewellery put away, and the cupboards and drawers locked. Flowers may be strewn over the bed or arranged about the room if thought desirable.

The body may be placed in a shell at once, or it may wait till the coffin is ready. The outside coffin may be of elm, pine, chestnut, mahogany, or oak: and of these, polished English oak is usually considered to be the best. Lead coffins, which were formerly used, are now dispensed with, unless there is some particular reason to the contrary. The London Cemetery Companies insist on their use for interment in brick graves, vaults, and catacombs; but for ordinary earth burial they are worse than superfluous, and add greatly to the expense. The removal of the body to the coffin is usually left to the undertakers, but it is most desirable that the nurse or some member of the family should be present. The coffin is first placed on chairs at the side of the bed. One attendant stands at the head, and another at the feet. One person stands opposite the middle of the coffin outside the chairs, whilst another gets on the bed, passes a broad rolled-up sheet under the body, and hands the end of it to the person opposite him. When all is ready, the body is easily lifted into the coffin. The bedstead should now be taken to pieces and removed, and the coffin placed in the centre of the room, or of any other room selected. In moving the coffin downstairs it is a good plan to make the bearers take off their boots, as the tramp of their heavy feet is most distressing to the friends in the house.

The last look is always sad enough; but even the misery of this dread ordeal may, with a little tact, be to some extent mitigated. Should the face be much discoloured, a little violet powder will hide it. When the time comes for closing the coffin, it is a good plan to make the relatives go out for a walk if possible. It is true that hammering is now generally avoided by the use of screws, but still some noise is inevitable. Handles to the coffin are an advantage, as they prevent the ropes from slipping when it is lowered into the grave.

The Death Certificate.—A "death certificate" will have to be obtained from the doctor in at-

tendance on the deceased, and this must be taken to the registrar of deaths. The law is, that "In case of the death of any person who has been attended during his last illness by a registered medical practitioner, that practitioner shall sign and give to some person required by the Act to give information concerning the death a certificate stating to the best of his knowledge and belief the cause of death, and such person shall, upon giving information concerning the death, or giving notice of the death, deliver that certificate to the registrar; and the cause of death as stated in that certificate shall be entered in the register, together with the name of the certifying medical practitioner." -

The persons qualified to give information to the registrar are the following:—

1. The nearest relatives of the deceased present at the death or in attendance during the last illness; and, in their default, any other relative residing in the same sub-district as the deceased.

In default of all such relatives—

2. Each person present at the death, and the occupier of the house in which the death occurred.

In default of all the persons above mentioned—

3. An inmate of the house in which the death occurred, and the person causing the body to be buried.

In addition to handing in the doctor's certificate, the informant must be prepared to state to the registrar—

(1) The date and place of death.

(2) The full names and surname of deceased.

(3) The age of deceased.

(4) The rank, profession, or occupation of deceased.

A regular form of certificate is usually employed, but the employment of such a printed form is not essential, and as a matter of fact many physicians never use them, but write the certificate on a sheet of note-paper.

When no registered practitioner has been in attendance, a certificate cannot be given, and an inquest will probably be held. The coroner has the power to order a post-mortem examination. The inquiry is often held in the parlour of a public-house; and nothing can be more disagreeable to ladies than to have to give evidence on these occasions. Such has happened before now merely from neglect of the necessary formalities.

Funerals.—Burial was practised by the Hebrews, Greeks, Romans, and Phœnicians. By the Hebrews no other method was adopted, but among the nations of antiquity cremation after a time superseded it. It is generally stated that the Greeks first resorted to cremation after the Trojan War, but this is a disputed point. Rome, in her early days, buried her dead. Remus was buried, so

also was Numa, but the Consul Manlius cremated the body of his son. The early Christians returned to the practice of burial; and as Christianity became more firmly established, the custom rapidly spread. The doctrine of the resurrection of the body has probably much to do with the popularity of this special mode of the disposal of the dead.

Funeral customs vary greatly in different countries. In England funerals are now conducted with much greater simplicity than formerly. Shrouds are objectionable, and are not used. Soldiers are sometimes buried in their uniforms, and to this there can be no objection. The same applies to ecclesiastics. The use of crape bands and scarves is a thing of the past; and the simple hatband, with black gloves, constitutes all that is necessary in the way of mourning attire. The armlet which is sometimes seen is not considered in very good taste, even a black overcoat is not essential. Except in the country, it is no longer thought necessary to provide luncheon for the mourners; and a glass of sherry and a biscuit, or a cup of coffee and a sandwich, on the return, will be ample. The friends attend to pay a last mark of respect to the deceased, not to feast at the expense of the survivors. Mourning-coaches are not used in good society, and a few broughams will be found to answer every purpose. Plumes and feathers are quite things of the past. The attendants should not ride on the funeral-car, but should have a separate conveyance. They should be attired as men-servants in a gentleman's household; and they expect no refreshment at the house, and receive no gratuities. Flowers are, of course, quite in keeping, and baskets or wreaths are often brought by the friends and laid on the coffin or casket.

An old-fashioned Funeral Account would contain various items such as the following:—

	£	s.	d.
Best Winding-Sheet, extra superfine quality	1	1	0
Seven Bearers, at 7/6	2	12	6
Use of State Pall in house	1	11	6
Black Hearse and four Black Horses	4	4	0
Coachman	0	10	6
Three Coaches and Pairs, at 42/-	6	6	0
Three Coachmen, at 10/6	1	11	6
Set of Hearse Feathers	2	2	0
Ten sets of Horse ditto, at 5/-	2	10	0
Set of Hearse Velvets	1	1	0
Five pairs of Horse ditto, at 5/-	1	5	0
Thirteen pairs of Gents' Kid Gloves, at 5/-	3	15	0
Seven ditto Ladies' ditto, at 4/6	1	11	6
Eight Best Silk Hatbands, at 14/-	5	12	0
Eight ditto Scarves, at 24/6	9	16	0
Six Crape Hatbands, at 6/-	1	16	0
Six ditto Scarves, at 21/-	6	6	0
Refreshments to Bearers	1	11	6
Labour, &c.	12	7	6

and so on without end. Such useless expenditure (amounting in this particular instance to over £60)

is now never incurred. Gentlemen wear their own gloves, and they are not provided. It is often directed in the will that a leaden coffin should be dispensed with, or that mourning-coaches should not be provided, and that the funeral expenses should not exceed a sum which is named.

A well-known writer in the *Times* says: "How long, I would ask, are we to be subjected to the tyranny of custom and undertakers? How long are we to be smothered with flowing hatbands, scarves, and mourning-cloaks, mobbed and overpowered by mutes, ostrich feathers, &c.? How long are we to continue to see the remains of some quiet old gentleman or lady, who perhaps never in his or her life sat behind anything more exalted than a small pony, drawn to their last home by four long-tailed black horses; or someone who, having lived unloved, dies unmourned, and is yet attended to his grave by half a dozen hired mourners at 5s. per day and their beer? Truly, it is all vanity and vexation of spirit; a mere mockery of woe; a prolongation and refining of misery to the really miserable; a source of ridicule and contempt to those who are actors or spectators; costly to all, far, far beyond its value, and ruinous to many; hateful, and an abomination to all; yet submitted to by all, because none have the moral courage to speak against it, and act in defiance of it."

The chief cemeteries in and around London are:—

In the West—Kensal Green and Brompton.

In the South—Nunhead, Norwood, and the Necropolis at Woking.

In the North—Highgate, Finchley, the Great Northern at Southgate; and Abney Park and Chingford Mount for Nonconformists.

There are in addition various parochial cemeteries which need not be enumerated. Many of our most popular cemeteries are so terribly overcrowded that no one would voluntarily elect to be buried in them. In provincial cities the cemeteries are, of course, well known.

The funeral should, if possible, take place on the third day after the day of death; and it should be remembered that funerals on Sundays are, except in cases of urgent necessity, no longer considered admissible. The service is commonly performed in the church the deceased has been in the habit of attending; and is usually read by some clergyman who is a friend of the family, and not by the cemetery chaplain, or in the cemetery chapel. Copies of the "Burial Service," with the hymns to be sung, are usually provided.

There are one or two other little points to which attention may be paid with advantage. The clergyman should be informed of the time at which the funeral may be expected at the church, and an

endeavour should be made to ensure punctuality. There is no more reason for being late with a funeral than with a train. The certificate of registration should be handed to the clergyman either by the chief mourner or the undertaker. The sides of the grave should be covered with planks, so that the mourners may look down without danger of following the coffin. When it is wet, and in stormy weather, a movable covered screen should be provided. People who are subject to colds, and those advanced in years, will do well to take with them a black skull-cap, so that they may not have to stand exposed to inclement weather at the side of the grave bareheaded. That valuable lives have been cut short in this way is well known. Someone should remain behind to see the grave filled in, for it is only a mark of respect, and will avoid the possibility of anything approaching levity or unseemly conduct on the part of the grave-diggers.

No monument should be erected for at least a year, so that the ground may have time to subside.

Embalming.—The first account of the art of embalming comes to us from the Egyptians, and we have no difficulty in obtaining a knowledge of the methods they pursued from an examination of the various specimens of their work which have been handed down to posterity. The embalmers were officially recognised, and seem to have occupied a position between the professors or teachers of medicine and divinity. Several different methods were resorted to, the perfection of the work depending on the sum which could be extracted from the friends or relations of the deceased. The substances most commonly employed were palm-oil, myrrh, cassia, cedar, cinnamon, and other aromatics, together with common salt or saltpetre. The process occupied some days, and the result was permanent. A Græco-Egyptian mummy unrolled a few years ago in London had the features so well preserved that the individual could have been recognised without difficulty, although he had been dead over two thousand years. The palms of the hands and the soles of the feet were quite soft, and yielded readily to the pressure of the fingers. The Peruvians preserved the bodies of their distinguished dead by burying them in the sand until they were quite dry, and then covering them with a kind of bitumen which kept them in such wonderful preservation that they retained a most life-like appearance.

In England embalming is now becoming rather fashionable, and in America the process is carried on upon quite a large scale. Distinguished Americans who die in this country are very commonly embalmed in order that they may be sent home, and their remains rest amongst their own people. It is

also performed on distinguished persons, and in the case of those to whom money is no object. It may be sometimes resorted to with the view of furthering the ends of justice, as when foul play is suspected, or a doubt is entertained as to the identity of the deceased. It presents no difficulty, and is easily performed by any doctor who is skilled in the methods here recommended.

There are several different plans, each of which may have certain advantages in special cases. One method is to expose an artery and inject through it, by means of a suitable syringe, a solution consisting of five pints of water at a temperature of 50° Fahr. saturated with chloride of zinc, to which are added two fluid ounces of the official hydrochloric solution of arsenic, and one pint of alcohol having a specific gravity of .830. This method is very successful; the skin is rendered white and smooth, and the features retain a wonderfully life-like expression. As an additional precaution, it is a good plan to inject into the abdomen and the cavities of the chest six ounces of a solution made by dissolving half a drachm of chloride of zinc in a mixture of equal parts of alcohol and collodion. When the process is complete, the body should be swathed in bandages soaked in a solution made by dissolving twenty grains of carbolic acid in an ounce of collodion. The hands and face should be left exposed, and the body may be clothed or dressed in any way that may be thought desirable. It is sometimes placed in a casket furnished with a window, so that the features may be seen. It may be kept for any length of time without the slightest fear of any change taking place.

What is called "needle embalming" is a still better method, as it obviates the necessity for making incisions which would be apparent on examination. The solution employed is made by dissolving five hundred grains of chloride of zinc in three pints of methylated spirit, to which is then added one pint of alcohol of specific gravity .830, and half a pint of chloroform, having dissolved in it 120 grains of benzoic acid. This is injected by means of a series of hollow needles varying in length from three to six inches. Two pints are introduced into the cavity of the skull by pushing the needles through the inner canthus of each eyeball. The fluid is carried by the veins all over the body, even to the tips of the fingers and toes. Half a pint is injected into the chest, and a quarter of a pint into the cavity of the abdomen. Five ounces should be injected by means of a long needle into the heart, three ounces into each arm, and four ounces into each leg. The process must be conducted slowly and deliberately, so as to avoid the danger of over-distension, or the rupture of a blood-vessel. The

body is swathed in bandages saturated in a solution composed of two hundred and fifty grains of pure tannin, ten ounces of alcohol of specific gravity '830, nine fluid ounces of collodion, one ounce of balsam of tolu, and as much gum benzoin as can be dissolved. The bandages should be six yards long, three inches wide, and should be firmly and evenly applied. When the body has to go on a long journey, it should be padded externally by surrounding it with some soft light material, in order that it may not be injured in transit by contact with the sides of the casket.

The best time for embalming a body is about twenty-four hours after death. What is known as Allen's Surgical Pump is a very useful instrument for the purpose. No special licence or permission is required, and there is nothing illegal in the process. When a person desires to be embalmed after death, he should leave directions in his will to that effect, and should make his friends acquainted with the circumstance, so that when the proper time comes the requisite steps can be taken.

Our Burying-Places.—It is to be feared that our burying-places are rarely permanent, and that in the great majority of cases the remains of the deceased are disturbed after a few years to make room for some new-comer. A writer in the *Times* some years ago observes: "Are we not becoming too much accustomed to the idea that anything, however sacred, may be turned into money? Is not this the case with regard to burial-grounds? They fetch a large sum, and they disappear. After the great Fire of London, care seems to have been taken in rebuilding the City to preserve in the main the burial-grounds of the parishes in which the churches themselves were not rebuilt. They are dotted as green spots all over the City, as many must often have observed. When the present extensive buildings of the Bank of England were erected, one whole parish was swallowed up. It was generally understood that its churchyard was respected, and is represented by the pleasant open garden court which gives such cheerfulness to the offices around it. St. Clement Danes' parish appears to view the subject in another light, and makes short work of the matter. Some years ago one of its burial-grounds, situate in Portugal Street, was disposed of for the site of part of King's College Hospital, and all trace of its former use has now disappeared. Since that occurrence it has parted with another of its burial-grounds, adjoining Clement's Inn, for the site of a portion of the New Law Courts. One burial-ground—its principal one—in the middle of which the Church of St. Clement Danes stands, still remains to the parish. An effort

is being made, in connection with the Law Courts, to induce the parishioners to sell this also. Can we hope, after what has been done, that they will be proof against it? I trust we may. Sites can be got without invading these small churchyards, which have been bought over and over again by those who lie in them."

Our memorial stones rapidly fall into decay, and so recent a headstone record as that of Gilbert White, in Selborne Churchyard, is found with difficulty. The majority of memorials erected in London cemeteries during the last fifty years have crumbled into dust. Burying-grounds in all large cities are in time neglected, and after the lapse of forty years no one seems to care much. In most of our cemeteries the mode of burial is disgusting in the extreme, the coffins being so closely packed that there is very little intervening earth. In Paris the foundations of roads are made of headstones only a few years erected. A recent writer says: "One day when in the cemetery of Mont Parnasse, I saw the workmen making a new road, the bottom of which was formed of broken headstones, many of them bearing a date *four years before*. These had been placed on ground which had not been paid for in perpetuity, and were consequently grubbed up at the end of four years, when the ground was required again for another series of these disgusting interments." The fact is, our present graveyards are not in reality a place of rest, and the remains of the dead are too often disturbed with but scant ceremony. This is usually done secretly, but such is not always the case; and only a few years ago the remains from a disused cemetery in the West Central district of London were actually carted into Kensington Gardens and used as manure. In the country it is of course different.

When the burial-ground is not consecrated, there is absolutely no protection. Only a short time ago proceedings were taken against an individual for removing human remains from a portion of the disused ground on the north side of the Congregational Chapel, formerly known as Whitfield's Tabernacle, in Tottenham Court Road. It appears that in 1756 the Rev. George Whitfield opened the chapel or tabernacle with about half an acre of ground attached to it as a burying-ground, holding the land on lease. The ground was never consecrated. The lease fell-in in 1827, and the ground was then closed for three years. In 1831 the trustees of the chapel purchased the copyhold, but as a security for the money borrowed they mortgaged the land, which in 1862 had to be sold. It was shown that the first interment took place in 1756, and the last in 1853. For ninety-seven years it was used as a place of interment, and in that time no less than 30,000 bodies were buried in that half-acre of ground. The land

was bought by the defendant in the case as a building speculation, and in 1863 he dug up and moved some of the bodies, for which he was fined £5. He then desisted, and allowed the ground to become a receptacle for filth, until it was such a nuisance that the sanitary authorities interfered. A few months later he again proceeded to disturb the dead, and the evidence given by the Inspector of Nuisances disclosed the method pursued. He said: "He knew Whitfield's burial-ground, and had known it thirty years. It was closed about 1853. It was thickly studded with graves in every part, and was in a populous neighbourhood. On Tuesday he went to the ground, which was then enclosed by a high hoarding. He was refused admission, but subsequently was admitted by an order from the magistrate. He found men at work excavating the ground, and there were horses and carts being loaded. Men were digging, and earth and human bones were being dug out together. He saw parts of human skulls, rib-bones, leg-bones, shoulder-bones, &c. There were decayed pieces of wood which had formed parts of coffins. There were about a bushel of human bones in a box near the carts which were being loaded, and in a trench he found about a cartload of human bones which had been previously dug out; there was only a sprinkling of earth over them. The workmen said they had no appointed shoot for the mould, and that they took it to Haverstock Hill, or elsewhere. He had visited the place again on Wednesday, and found the men still at work. Four horses and carts were being loaded, and the mould taken away through the streets." It was contended that the burial-ground not being consecrated, there was nothing to prevent its being built over.

Even when the ground is consecrated, it may share no better fate. The condition of London graveyards is something terrible to contemplate. In the Metropolis, in spaces of ground which collectively do not exceed 230 acres, most of them in close proximity to the abodes of the living, there are piled layer after layer of bodies, probably upwards of a million having been interred in these places during the present generation. Wells in the neighbourhood of churchyards are nearly always unsafe, and surface-wells must of necessity become contaminated and rendered unfit for use.

M. Ducamp discovered in Paris not long ago a well, the water of which, entirely derived from cemeteries, had acquired a sulphur-like taste, so that people purchased it and drank it as a mineral water. Some years ago, by the bursting of a reservoir, a graveyard was washed away, and over a hundred decomposing bodies were floated into houses and gardens in the neighbourhood, from which many of them were not removed for upwards of a fortnight.

In 1873 it was estimated that 80,000 bodies were buried in the Metropolis every year, generating no less than 2,572,580 cubic feet of gases, the whole of which, beyond what is absorbed by the soil, must pass into the water below or the soil above. Since then the numbers have enormously increased.

It will be remembered that in ancient times burial within cities was rarely practised. It was forbidden by the Roman law, and among the Greeks was practised only by the Lacedæmonians, who were taught by Lyeurgus to bury in the city and erect monuments, to familiarise the youth with the spectacle of death, and that they might remember and emulate the heroic deeds of their forefathers. To the inhabitants of Syracuse the custom of extramural burial once proved of the greatest practical value. When the city was besieged by the army of Hannibal, the enemy, in order to obtain material for building a wall to command the city, destroyed the tombs of the city. The bodies were scattered about, and gave rise to a pestilence which destroyed the invaders.

In a debate on the Burials Bill in the House of Lords in 1850, the Earl of Beaconsfield pointed out that what is called "God's Acre" is not really adapted to the country which we inhabit, the times in which we live, and the spirit of the age. "What I should like to see," he added, "would be a settlement of this question by the shutting up of all God's acres throughout the country. I think the churchyard of the ordained minister, and the graveyard of the dissenting minister, alike are institutions which are very prejudicial to the health of the people of this country; and their health ought to be, if not the first, at any rate one of the first considerations of a statesman.

"Now we have been moving gradually in the direction of these views, and there has been for some years a notion—soon about to amount, I believe, to a conviction—that the institution of churchyards is one which is highly prejudicial to the public health. I think it would be a much wiser step if we were to say that the time has arrived—seeing the vast increase of population in this country, and the increase which we may contemplate—when we should close all these churchyards, and when we should take steps for furnishing every community with a capacious and ample cemetery, placed in a situation which, while it would meet all the requirements of the society for which it was intended, would exercise no prejudicial influence on the public health."

Some years ago Mr. Seymour Haden advocated "earth to earth" burial—that is, burial without any coffin, the body being simply deposited in a wicker basket. This is, to all intents and purposes,

a return to a very old custom; and although decay would undoubtedly take place more quickly, it would hardly meet the sanitary objections which have been so repeatedly raised against our commonly accepted methods. Mr. Haden maintained that as after coffinless burial the body decays away in six years, it would be possible to bury again in the same ground with no other effect than to increase its substance, and to raise its surface. This is a contention which is untenable. The practice would be dangerous to the living, from the pollution of the soil, and opposed to every sentimental idea of the respect which should be paid to the remains of the departed.

That the use of coffins and brick graves does, however, considerably retard the process of resolution which should take place after burial, is shown by the following extract from an interesting letter which Mr. Seymour Haden published in the *Times* :—

"In 1868," he says, "I was permitted to visit the burial-ground of St. Andrew's, Holborn, then, with its contents, in course of removal to make way for the new Viaduct. The ground about the church had become raised 15 ft. or 18 ft. above its original level, and perpendicular sections had been made in it here and there, from its surface to a depth varying from 10 ft. to 30 ft. or more. The face of these sections represented the interments of three centuries and a half. All the burials, except those in the Plague-pit, and one or two others to be presently mentioned, had been made in wooden or leaden coffins, some of which were still intact, and some broken in. Little difference as to condition could be perceived between the coffins of Charles II.'s time and those recently used, or between the coffins which were of lead and those which were of wood. In the coffins which were intact were their contents, also intact, but putrid, unrecognisable. In those which had been broken in, nothing was to be found but a little ordinary earth, corresponding chiefly to the extraneous matters which had accompanied the interment, and occasionally, not always, a few bones—nothing more. The body itself had disappeared, and 'earth to earth' had been accomplished. Here and there, in other parts of the ground, were graves lined with brick and filled with water, in which the coffins of those who had been buried in peculiar honour still floated—some head, some feet uppermost, as their gaseous contents determined. Here, again, a few fetters indicated the spot where some evil-doer had undergone what was intended, no doubt, to be the last sentence of degradation, but whose poor body, having had the advantage of being buried without a coffin, had disappeared—as had also, for the same reason, the tenants of the Plague-pit. The whole tangible remaining mass, consisting of several thou-

sand bodies, was removed night by night to Ilford, where it now lies in a pleasant garden, and the new Rectory House of St. Andrew's stands upon the restored level."

Cremation.—The disposal of the human remains after death by the process of cremation, which rapidly resolves the body into its component elements, in an absolutely innocuous manner, is now largely practised throughout the civilised world, where formerly burial in the earth alone was carried out. The modern movement in its favour commenced ten or twelve years ago, and the method has been strongly advocated by Sir Henry Thompson, Dr. Charles Cameron, Mr. W. Eassie, and other well-known writers. Over 1,500 bodies have been cremated in Italy and Dresden already. Cremation societies have been established in every European country, and many of the States of America possess them also, cremation having become there a regular practice. There are several cremation societies in Switzerland, and one large society in Holland has many branches. In Brussels there is a society which numbers over four hundred members. At the conclusion of the Franco-Prussian War, M. Creteur was thanked by the Government for his successful cremation of the bodies of the soldiers who fell near Sedan.

There are two patterns of crematories in use—the German and the Italian. The latter was chosen for use at St. John's, Woking, Surrey, where cremations have already been carried out, there being no legal bar to its performance in Great Britain or the colonies. The cremation of an adult by either process is complete in about an hour, and the ashes, which are perfectly white, weigh about five pounds. The cost of reduction, if it became common, would be about thirty shillings, but at present is about £6, owing to the necessity for heating the crematory every time for cremation. The literature of cremation comprises over 600 volumes; no mean share of them having been produced in England since the first "Essays" published by Sir Henry Thompson. The Cremation Society publishes "Transactions" which are replete with plans, and every information as to medical certificates, &c. The honorary secretary is J. C. Swinburne-Hanham, 8, Cavendish Street, Portland Place, London, W.

The general feeling of medical men in this country is strongly in favour of cremation. At the meeting of the British Medical Association at Cambridge in 1880, Sir Spencer Wells delivered an address on the subject, and the following address to the Home Secretary was adopted :—

"We, the undersigned members of the British Medical Association assembled at Cambridge, dis-

approve the present custom of burying the dead, and desire to substitute some mode which shall rapidly resolve the body into its component elements by a process which cannot offend the living, and may render the remains absolutely innocuous. Until some better mode is devised, we desire to promote that usually known as cremation. As this process can now be carried out without anything approaching to nuisance, and as it is not illegal, we trust the Government will not oppose the practice, when convinced that proper regulations are observed, and that ampler guarantees of death having occurred from natural causes are obtained than are now required for burial."

The feeling of the more intelligent clergy is, with few exceptions, undoubtedly in the same direction; and at the opening of the Social Science Congress at Manchester the Right Rev. the Lord Bishop of Manchester spoke as follows:—

"I now draw attention to the provision made in our cities for interment of the dead. On Friday last I consecrated a portion of a new cemetery, provided by the Corporation, on the south side of Manchester, fully five miles from the centre of the city, containing ninety-seven acres, at a cost, including the land, the fencing, the laying-out, and the inevitable three or four chapels, of £100,000. It is very beautiful, but two thoughts occurred to me as I was consecrating the portion of it assigned to those who desire to be buried according to the rites of the Church of England. In the first place, this is a long distance for the poor to bring their dead; in the second place, here is another hundred acres of land withdrawn from the food-producing area of the country for ever. I do not think we always observe or calculate how much this area is being gradually contracted by the infinite number of works and processes requiring space, but not producing food, which are encroaching upon it more and more every year: nor to what extent the power of the country to support its population is reduced thereby. *Jam pauea aratro jugera regie Moles relinquent.* In times of peace and plenty we can afford to be indifferent to this consideration; but I can easily conceive the existence of circumstances which would make this a very serious condition indeed. I feel convinced that before long we shall have to face this problem—'How to bury our dead out of our sight'—more practically and more seriously than we have hitherto done. In the same sense in which the 'Sabbath was made for man, not man for the Sabbath,' I hold that the earth was made, not for the dead, but for the living. *No intelligent faith can suppose that any Christian doctrine is affected by the manner in which, or the time in which, this mortal body of ours crumbles into dust and sees corruption.*"

In opposition to this very decided expression of opinion, the Bishop of Lincoln stated, curiously enough, that one of the first-fruits of the adoption of cremation "would be to undermine the faith of mankind in the doctrine of the resurrection of the body." The obvious answer is that it would be no more impossible to raise up a body at the resurrection out of the elementary particles liberated by burning, than to raise up a body from dust, and from the elements of bodies which had passed into the structure of worms. Or, on the other hand, what bishop of any Church would deny resurrection to a Christian martyr burnt at the stake?

After cremation the ashes would be collected in urns; and by the adoption of urn burial, all that relates to the artistic embellishment of a cemetery would be at once placed on a very different footing. These urns would be deposited in a crematorium, which would serve as a permanent resting-place for the ashes of the dead. To a people scattered over the world like our own, the ease with which they could be brought from any distant country to their final resting-place at home, without inconvenience and at little cost, deserves consideration. The ceremony of urn burial itself involves nothing in any way repulsive. The simplest urn ever made for the ashes of a Roman soldier is more beautiful, from an artistic point of view, than the most costly trappings used in the burial pageants of modern times. Of urns of a more ambitious kind, the variety and beauty are often quite remarkable, as witnessed at the British Museum and in many private collections.

As has been already stated, there is nothing illegal in the practice of cremation, and this was shown by the charge of Sir James Stephen delivered at Cardiff in February, 1884. There are no practical difficulties in its performance, even in England. On communicating with the Cremation Society, 8, New Cavendish Street, London, the secretary will make all necessary arrangements. The charge for the use of the crematorium at Woking, for all attendance there, and all expenses connected with the ceremony, is only £6. The Society's agents, Messrs. Garstin and Sons, of 5, Welbeck Street, Cavendish Square, W., are prepared at a few hours' notice to remove the body in a hearse from any house or station in London to the crematorium. The simplest shell or coffin will suffice; and it is desirable that the expenses should be reduced to the minimum. A funeral service may be held at the ordinary place of worship of the deceased.

Any person who pays a fee of ten guineas to the Cremation Society becomes a Life Member, and is entitled at the expiration of his membership to be cremated free of charge.

LAYING OUT A GARDEN.

Aspect and Surroundings.—The aspect of a garden is a matter of primary importance, and may be said to be the keystone of future success or of disappointment and failure. It is well, at the commencement of laying out a garden of any size, to call in a landscape-gardener of known ability, and to obtain his practical advice on the preliminary arrangements, if not later on. Failing this, any gardener of experience should be consulted, if possible, preferably to proceeding on indefinite and uncertain lines. By following the advice obtained in this manner, it will be possible to avoid needless expense, and useless employment of labour in matters of detail, altogether unforeseen except by a practised eye.

The aspect of a garden cannot, of course, be always chosen as one would desire, by reason of the position of the house; but, where possible, every means should be employed to secure a shelter from easterly winds, if only of a partial character. Quickly growing trees, such as planes, poplars, and limes, can be planted as screens; these should be interspersed with evergreens and trees of a more permanent character, which, in a great measure, would eventually supersede the first-named, or permit of their being kept in a somewhat closer compass than they would assume if left more to themselves, particularly the limes and poplars. If away from the prejudicial effects of the smoke, &c., surrounding our large towns and cities, no better choice can be made than from the fir-tree family, either the Scotch fir (*Pinus sylvestris*) or the Austrian fir (*Pinus austriaca*); of the two, we prefer the latter, by reason of its denser and more compact growth. A single line, if no more, of either of these trees would be, of itself, a boon to any garden on its eastern or northern side. Where these would not succeed, hollies might be advantageously chosen; although of slower growth, they would eventually be of good service, having the merit of answering the purpose for which they are intended, as well as being capable of being kept in close compass by a judicious use of the knife. A capital screen, too, can be made by planting hollies and beech alternately, thus affording a variety.

The Soil.—Having dwelt on the preliminary matter of shelter, where it does not already exist in some form or another, we will proceed to the important subject of the arrangement of the garden itself. In the first place we will assume that the selected site is of virgin soil, or, in other words, has not been previously under cultivation as a garden. If this is the case, it must be a bad spot indeed, and the soil of the worst description, if a successful garden

cannot in due time be the reward of the outlay and labour expended upon it. To start at the beginning in a satisfactory manner, it is necessary to forestall the builder in his excavation of the ground for the foundations of the house. This is most essential in order to preserve all the best of the *top soil* for future use; yet it is scarcely ever done, the soil being too often, we regret to say, sold off from the ground to realise a few paltry shillings at the time, which will in such cases ultimately take pounds to replace. It is folly to act in this way, for the soil thus removed will cause the subsoil to be more freely made use of, with the result that in the end better soil will have to be re-carted on to the garden, to replace that which had been previously taken away.

The spot for the house having been chosen, all the good soil excavated from that also should be removed sufficiently far to preserve it from being trodden down and rendered next to useless: this not only refers to the soil immediately on the site, but sufficient should be removed from the immediate vicinity to escape injury from being trampled upon during the process of building. The soil saved in this manner will, after the completion of the house, be an immense boon for using near it, for the successful growth of shrubs and flowers, or in the formation of the lawn; for if there is one spot more than another in a garden where things should be thriving, surely it is near the house itself. It is possible that some trees may already be standing upon the ground, and due care should be taken of such, if they are at all likely to be of future use or ornament. At least they may be retained for the first few years, until fresh ones have grown, unless the position renders them actually objectionable. The ground around such trees should be but slightly altered, and the level should not be lowered, but rather raised a trifle, in order to rejuvenate the trees. On no account should any material amount of soil be added, or the result will be, in the majority of such cases, serious and permanent injury to the roots, either from drought, or by reason of the depth of extra soil excluding the air from them. If the trees retained are considered too large and spreading, some of the outer boughs can with safety be removed in nearly every case.

Character of the Garden.—The arrangement of the newly acquired garden must in a great measure depend upon its size, as well as the tastes of the occupier. In the case of gardens of very limited extent, such as those adjoining semi-detached houses, terraces, or small villas, we do not recommend any space to be taken up with the growth of vegetables. The returns, where vegetables are grown, will not

be commensurate with the outlay in a confined space, unless it be to cultivate a few tomatoes or scarlet-runner beans against the wall in a sunny position. Vegetable culture, to make it a success, involves more manual labour, and just as much or more experience, without yielding the pleasure that is to be derived from the cultivation of flowers and a well-kept lawn; neither is the kitchen-garden so attractive during the winter season, nor can it at all times be kept so neat and clean. Preference should most decidedly be given to a good-sized lawn, especially if space permits a level piece of turf for a full-sized tennis-court, capable also of being used for other outdoor games. This will be a constant source of pleasure, besides giving the advantage of better appearance, as well as an open space. Again, if the size of the garden forbids much variety, the amount of the shrubs should be kept down, appropriating them chiefly to obtain a good marginal belt or outline; whilst the borders in front of the shrubs can be planted with dwarf flowering plants, instead of taking up too much space with flower-beds on the grass.

The Flower-Garden.—Where the garden is of sufficient extent, we strongly advise that the flower-beds be grouped together, rather than dispersed over the lawn itself. A better effect is thus produced, and with less material. Rather more depth of soil will be needed for the flower-beds than for the lawn, but not so much as for shrubs. They should be raised slightly above the level of the surrounding ground, but not to any considerable extent, as the addition of manure from time to time will soon make them prominent enough. It may seem waste of labour to recommend the turfing of the ground all over prior to arranging the flower-beds; yet this will be found the best course in the end. The turf should be laid, beaten down, and to all appearance left for an unbroken lawn. Then the flower-beds can be designed and cut out to the required shape, afterwards removing the turf from each bed. In this manner the designs will be found to be cut much more truly, and with a cleaner edge, than if done otherwise. The turf need not be wasted, but may be used as occasion requires in other parts of the garden. The addition afterwards of a little soil, and that as good as possible, will be needed; then the beds should be dug deeply, and later in the season forked over, to bring the ground into good condition for planting when the proper season arrives.

As a rule, we do not advise that flower-beds should be edged with box, and gravel walks formed between them; it does not so well suit the flowers, nor does it harmonise with them so well as grass. Box-edging requires attention and care to keep it in good

condition; it is likewise a harbour for various insects, especially snails, which will cause annoyance and trouble. If any edging is needed, it is a better plan to use edging-tiles, of which the best pattern is the blue cable, of terra-cotta ware; no edging will, however, be required if the ground-work is of grass. When flower-beds are grouped together, plenty of space should be allowed between each bed, rather than having them crowded together too closely. A space of two feet six inches to three feet between each bed will not be too much. In the course of a few seasons, with frequent cutting of the edges, the space between the beds will be reduced, leaving the beds larger. In designing the beds themselves, a too complicated style should not be aimed at; narrow points and sharp curves are awkward, both as regards good effect and for the proper mowing of the grass.

The Kitchen and Fruit Garden.—This is a most necessary adjunct to every house where the garden is of sufficient size to permit of its profitable cultivation, for it will assuredly bring both pleasure and profit to the successful cultivator, and it can at all times be made attractive, except in the depth of winter. In allotting the portion of ground for this, the *successful cultivation* of the subjects grown should be the prime consideration, and the kitchen-garden should not be made a convenience of to fill up some odd corner not otherwise required. In the latter case it is by no means a matter of surprise if the returns are reduced to a minimum. Protection is needed, so far as it can be secured and provided for, against easterly winds and northerly blasts, both for fruits and vegetables, but especially for the former whilst in flower, and the latter if required early in the season. The ground should be laid out to the best advantage in proportion to its size; and in order to economise space, it is not well to take up too much room with paths. Some are of course needed, but the ground is often too valuable to afford more than are absolutely required.

The ground, if not previously used as a garden, should be broken up by deep trenching to the depth of about two feet. In some soils, if at all disposed to be heavy, this may require to be done twice before being planted or sown with seeds. If the soil is poor in quality, some manure may be required to be added the first time of digging. Where gravel is found to be prevalent, and that near the surface, this deep digging should not be carried out to such an extent; in these cases it is better to dig the top spit with a spade, and fork up the bottom of each trench as the work proceeds. Ridging the ground during the winter months needs only to be performed on stiff or clay soils; in such instances, it will act as a pulverising agent, and facilitate the securing of a crop.

This operation is easily performed by backing two spits of soil against each other, and will be found to be of more service in newly acquired ground than at any future time.

Asphalte is no doubt the best material of which kitchen-garden walks can be formed; the expense will, in the first instance, be the heaviest, but thence onwards the expense of keeping them will be far less, both in labour and maintenance. Next to asphalte, gravel should be chosen; and if kept in good order by rolling and freedom from weeds, will look well; but it must be borne in mind that where asphalte is used, these items of labour, and occasional renewal of gravel, are not required. If the gravel paths have been neglected, and become excessively weedy, the best and most effectual plan will be to apply one of the mixtures now so freely used and labelled "Weed Killer." One or more advertisements of such are to be seen in nearly every horticultural paper, each one no doubt being effectual. Hand-weeding is out of the question where a vast amount of gravel paths have to be kept clean. The terra-cotta edging will be better than box, for reasons previously given; and no injury can be done to the former where the weed-killer has to be used. Scrapers should be provided in every kitchen-garden to assist in preserving cleanliness on the walks. These can be easily made by an ordinary labourer with some stout pieces of wood and thick hoop iron. Two pieces of wood should be driven firmly into the ground about fifteen inches apart, and then with a saw a cut should be made downwards on the top of each piece, deep enough to receive the strip of hoop iron, which may be tightened by one or two nails driven in so as to act as wedges.

Unless there is ample space at disposal in the kitchen-garden, the growth of potatoes should not be attempted; they can, in nearly every locality, be bought more cheaply than they can be grown in gardens of limited size. It is more profitable to devote a larger portion to fruit-trees. Espalier-trained pears and apples would make good back-grounds to narrow borders next the walls. Currants and gooseberries could also be planted in lines next to, and parallel with, the walks; devoting the central portion of the ground to vegetables, with a few standard fruit-trees here and there. Strawberries would, by reason of frequent renewal, require a portion of the vegetable-ground; but of cultural detail we shall speak more fully in future articles. Every available space of wall should either be occupied by fruit-trees, or turned to other productive use, as the growth of tomatoes and scarlet-runner beans. The walls facing south, west, south-west, and south-east should be chosen for peaches and nectarines, also tomatoes; those of other aspects being devoted to pears, plums, and cherries. Morello cherries are

better grown as standards, requiring little attention, and being most productive. Horizontally trained pears, cherries, and plums are easier to manage than palmate-trained trees. Standard fruit-trees, as apple and pear, the former more particularly, could be planted in favourable spots among the shrubs; they would compare most satisfactorily with any other flowering shrub in the spring-time, with the additional beauty and profitable return of the fruit in the autumn. For this purpose, free-growing and productive sorts should be selected; but lists of fruit-trees will be given later. Herbs should have a spot devoted to their growth, especially those best known and most sought after.

Plans.—A few plans are now given as embodying general hints for gardens of very various extent. Fig. 1 is a plan for a garden (with house included) of about one acre in extent, and is drawn to a scale of thirty-five feet to the inch. It is arranged so as to face due south, but could be varied to face either to south-east or south-west without making any great change in any of the arrangements. With other modifications of no great extent, it could be varied to suit a west aspect, and thus the house itself would become a screen to the garden from easterly winds; but if it should be required to face the east, protection must be provided along the bottom of the kitchen-garden quarter, and the position of the glass-houses be reversed. If facing to the north, the protection just given would still need to be carried out, protection being also provided on the east side. A denotes the house. B gives the spot for a conservatory twenty-one feet wide and forty feet in length, part of which might be arranged with rockwork to form an indoor fernery, by varying the position of one of the two doors which are provided on the north and south sides. A doorway could also be arranged to open into the house, and would be a distinct advantage as a means of convenient access. The heating apparatus for warming the conservatory, and the storage for fuel, could be provided for in the cellars of the house, or under the conservatory itself. A stage for pot-plants should be fixed around the structure, and next the glass; this should be eighteen inches wide, and on a level with the top of the brickwork which forms the wall around the building. Under this stage the hot-water pipes may be conveniently arranged, for which we recommend four rows of four-inch pipes (no saving is effected by having a smaller size or less number, as extra firing will then be required), which should be jointed together with india-rubber rings; and we strongly advise that this method of jointing be insisted upon, it being much superior to any other plan. On the wall of the house forming the eastern side of the

conservatory some wire-work could be fixed for climbing plants, a border being provided for them, and slightly raised to give it prominence. The stronger-growing of these climbers would eventually betake themselves to the roof of the building, and assist in forming a shade, as well as producing a good effect when in flower. Such a house would need six or eight columns to support the roof, and these could likewise be turned to good account and rendered ornamental with climbing plants.

After allowing for a path round the conservatory of about three feet six inches wide, there will be ample space to form an excellent centre bed, which could be occupied by fine-foliage plants or camellias, according to taste, or a portion devoted to one and a portion to the other, keeping the latter on the shady side. This will be found a far better and more economical plan than providing a stage for pot-plants. If preferred, camellias may be trained on the wall instead of climbing plants. As the centre bed would be ten feet six inches in width, and thirty feet in length, it would be better to intersect it by a path five feet wide, thus forming two beds. These beds should be provided with a substantial edging, either of cement, stone, or terra-cotta, thus raising the beds, as recommended for the side-border, to a uniform height of four inches above the paths. The paths should be paved or cindered to form a permanent walk easily kept clean. The modes of ventilation differ, each builder generally having some plan of his own. It should be seen, however, that side as well as top ventilation is provided for, and the latter should be arranged with lifting-gear, and not running-lights.

c on the plan can be arranged as vineries, in two divisions, twenty-five feet each in length, or devoted to other purposes. In future articles we hope to enter more fully into vineries and glass structures other than the conservatory. e is the spot for the stove-hole and boiler for heating this structure. d provides for forcing-pits or frames, which can be heated from the same source.

At f is denoted a capital spot for a commodious summer-house at one end of the terrace; it should be slightly raised above the ground. A good view would be obtained from it across the tennis-ground and lawn beyond, as well as towards the conservatory and flower-garden. ff is also a summer-house or arbour, from which another good view of the grounds could be obtained, embracing the greater portion of the garden. g gives a suggested bed for roses, readily capable of holding a good number of plants, yet easily accessible by reason of its shape; standards could be planted in the centre and graduated down to dwarfs in the front. h is a good spot for a rockwork garden. It should be screened on the north and east by trellis-work,

or an evergreen hedge; the southern side could be arranged with some rustic work, over which climbers could be trained. i marks spots selected for specimen shrubs or conifers, for which plants of prominence should be chosen. j would be a good position to devote to rhododendrons and other similar plants requiring soil of a like character; the plants on this spot would be screened on the eastern side by the taller shrubs behind them. k is chosen for herbaceous plants of a showy nature (dahlias could be intermingled with them), as from this spot they would be seen well. l is a narrow border in which evergreen climbing plants could be grown for training up the walls of the house, leaving room for flowering plants in front of them.

m denotes the flower-garden laid out on grass. It will be found of ample size for nearly every requirement, and will, in the position chosen for it, accord well with the conservatory. Such a garden, too, should be planted every autumn either with bulbs or with spring-flowering plants, all of which look best when grouped together. The central bed might very conveniently and appropriately be selected as the site for a fountain, the width (ten feet) being quite sufficient; or it would do for, and look well if planted with, Pampas Grass or a good specimen of *Araucaria imbricata*. The latter would not be of too dense a character, so as to detract from the effect of the flower-beds around it. n would provide good spots for rustic baskets, or large vases for plants.

At o is shown the back entrance to the house itself, and also to the garden. Such a provision should always be made, in order to secure greater privacy. A row of tall trees to act as a screen could be planted close to the boundary wall along this path, cutting off the lower branches to afford room for a convenient passage. At the junction with the path to the back door a rustic gate would be an advantage, or a light door, if deemed advisable, could be chosen. This should be repeated at the point of connection with the kitchen-garden lower down, and on the opposite side of the garden also, near x. r gives the position of the paths on the lawn and in the kitchen-garden, the width in the former case being five feet six inches, and in the latter, in order to economise space, four feet, which could be made to fulfil all necessary purposes. q provides the carriage-drive to the front door by means of two gates, and is planned for a width of fifteen feet—enough for all requirements. s indicates the terrace, the width of which is set at from eleven to thirteen feet, which should not be in any way reduced if the room can be spared. Along this terrace some few vases slightly raised on pedestals would be a distinct improvement; these should stand along the margin

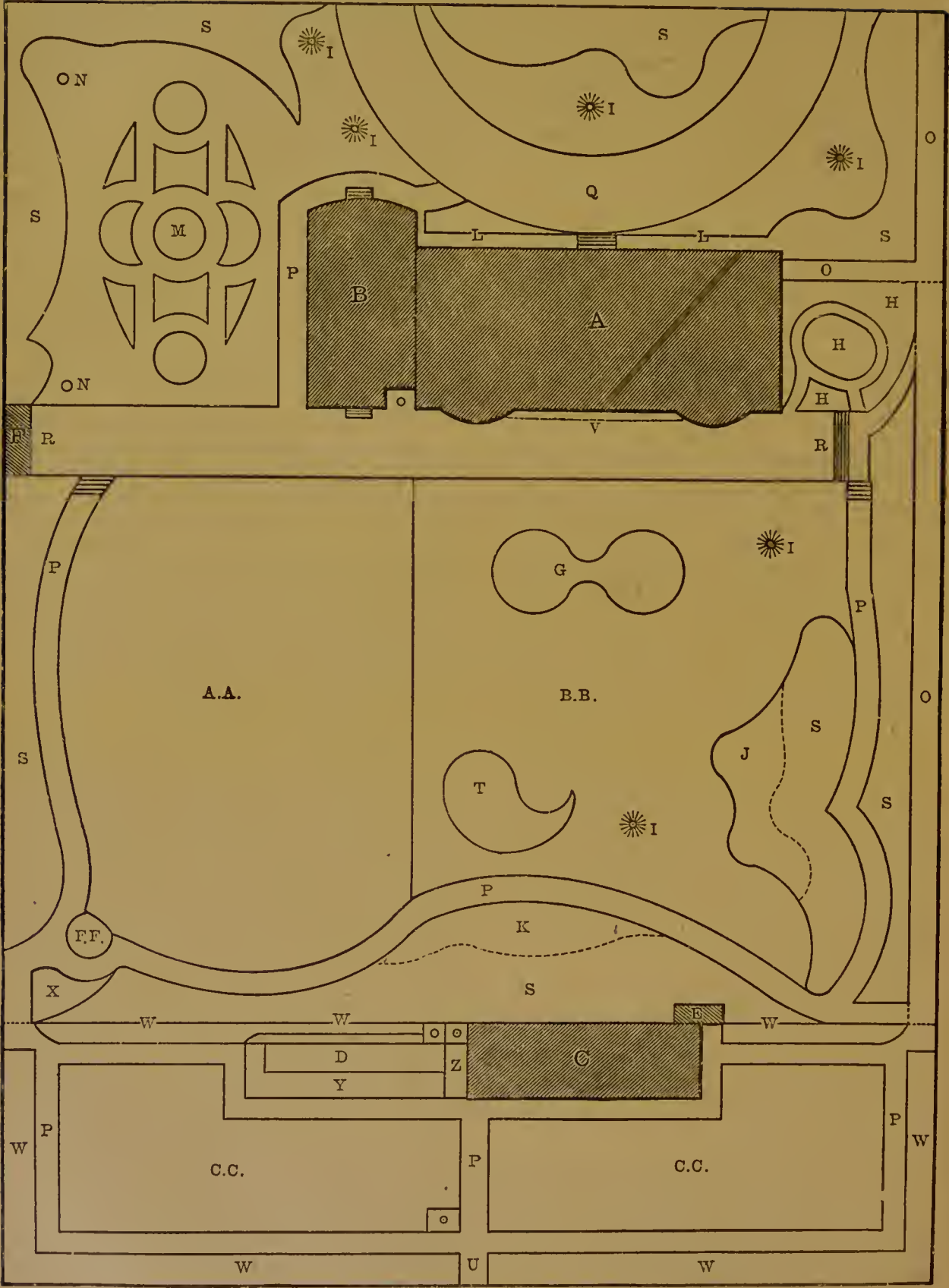


Fig. 1.—PLAN FOR ONE ACRE OF GROUND.

of the grass at regular intervals. s shows the various positions chosen for shrubs, the height in each case being varied to suit the circumstances of the individual case. Those next the kitchen-garden need not be selected of any great height; the same remark applies to those planted next the carriage-drive. A few taller-growing specimen trees should, however, not be objected to, but rather chosen to give variety in every instance where there is room for their future development. t represents a bed

of the stronger-growing kinds. x provides for a good place to store manure and other material needing a screen, which could be effected by planting an ever-green hedge between it and the path on the south side. z provides a space for a tool-house and potting-shed, which could be extended over the tanks adjoining, or made wider by taking in a portion of the ground devoted to frames. ☉ provides for the rain-water tanks, remarks on which have already been made. A A shows the ground

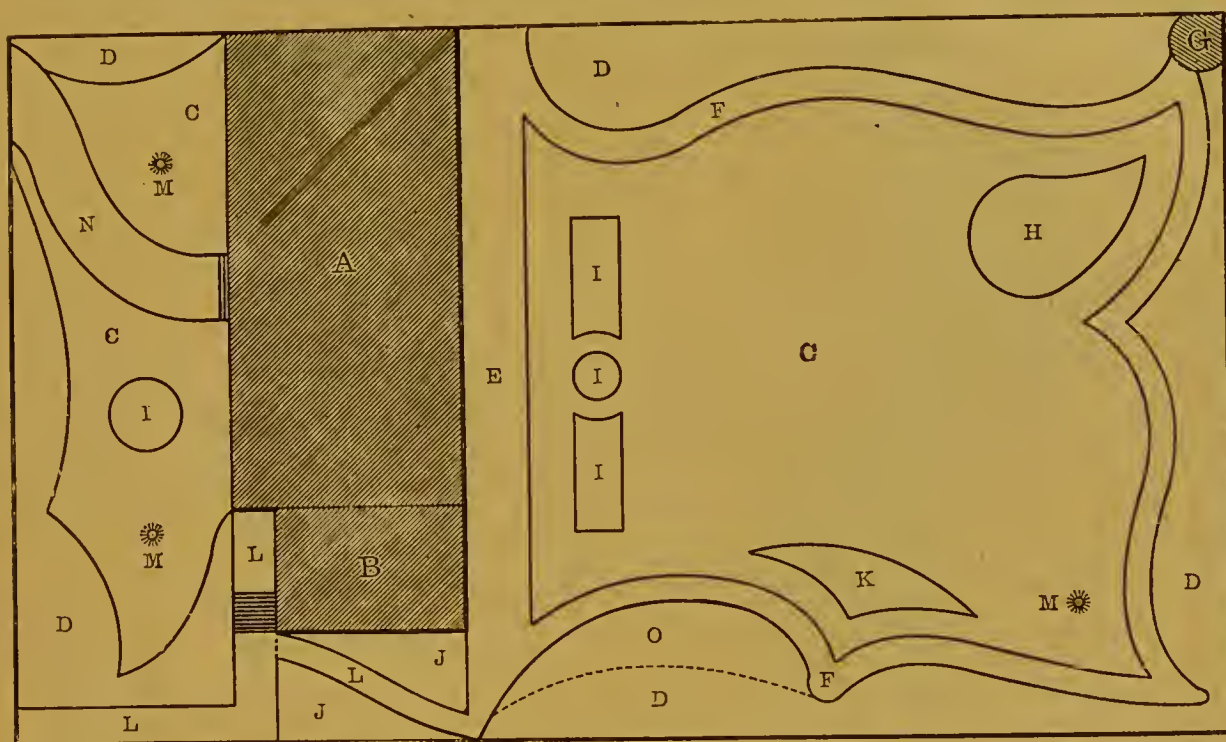


Fig. 2.—PLAN FOR VILLA GARDEN. (Scale 30 feet = 1 inch.)

the filling of which can be made optional. We would suggest that it be devoted to liliaceous plants and bulbs of a similar nature, narcissi (daffodils) included. Such a bed would be of a distinct character, and at the same time be found to possess prolonged attractiveness. u is a good spot for a back entrance for the exit of refuse and the bringing in of manure and other garden requisites of a heavy nature. v indicates a suggested verandah, the top of which should be covered with glass and climbers trained up the columns, and *thinly* underneath the roof. Such a place would be an excellent home for many plants of a semi-hardy nature—*Passiflora caerulea* (the blue passion-flower), for instance—and would be found at all times attractive. This we also strongly advise to be adopted in every possible instance as a sure source of pleasure. w is to point out the position of wall fruit-trees. x would be a good spot for a fernery composed

allotted to lawn-tennis, for which it will be found to be of ample size by the use of side netting where required. B B is the lawn, the other portions of grass being around the flower-beds, and adjoining the carriage-drive. C C is the kitchen-garden.

Should it be required to provide a spot for a piece of ornamental water, the lawn would have to be somewhat modified in extent; the bed marked t could be dispensed with, and the plants recommended for it might be grouped together by the side of the water to suit the taste, but raised above the water-level to keep them in a healthy condition. Much space cannot well be devoted to water, but by removing the bed as suggested, and by contracting the space marked out for shrubs, the means will be secured of growing aquatic plants which could not otherwise be attempted with success. The sides and bottom of this ornamental water would need to be well puddled with stiff clay to a thickness of six or nine

inches, according to the nature of the subsoil. Concrete sides and bottom would be far more satisfactory and durable, but more expensive in the beginning; yet they are far more reliable, and are more easily emptied and cleansed when needful.

This plan could be adopted to a smaller scale, very slight alterations being needful to carry out the main body of the plan. The two beds on the grass for roses and other plants (g and t) could be moved,

required. r denotes the paths skirting the grounds, which are allowed of an average width of four feet six inches. c is a summer-house in a rather secluded portion of the garden. n would do well as a bed for roses, whilst i denotes the site for bedding-out plants, and k is a spot for rock-plants not requiring shade. l is the back way to the house and garden. j suggests a good place for a fernery with climbing plants. m points out good spots for specimen conifers, or

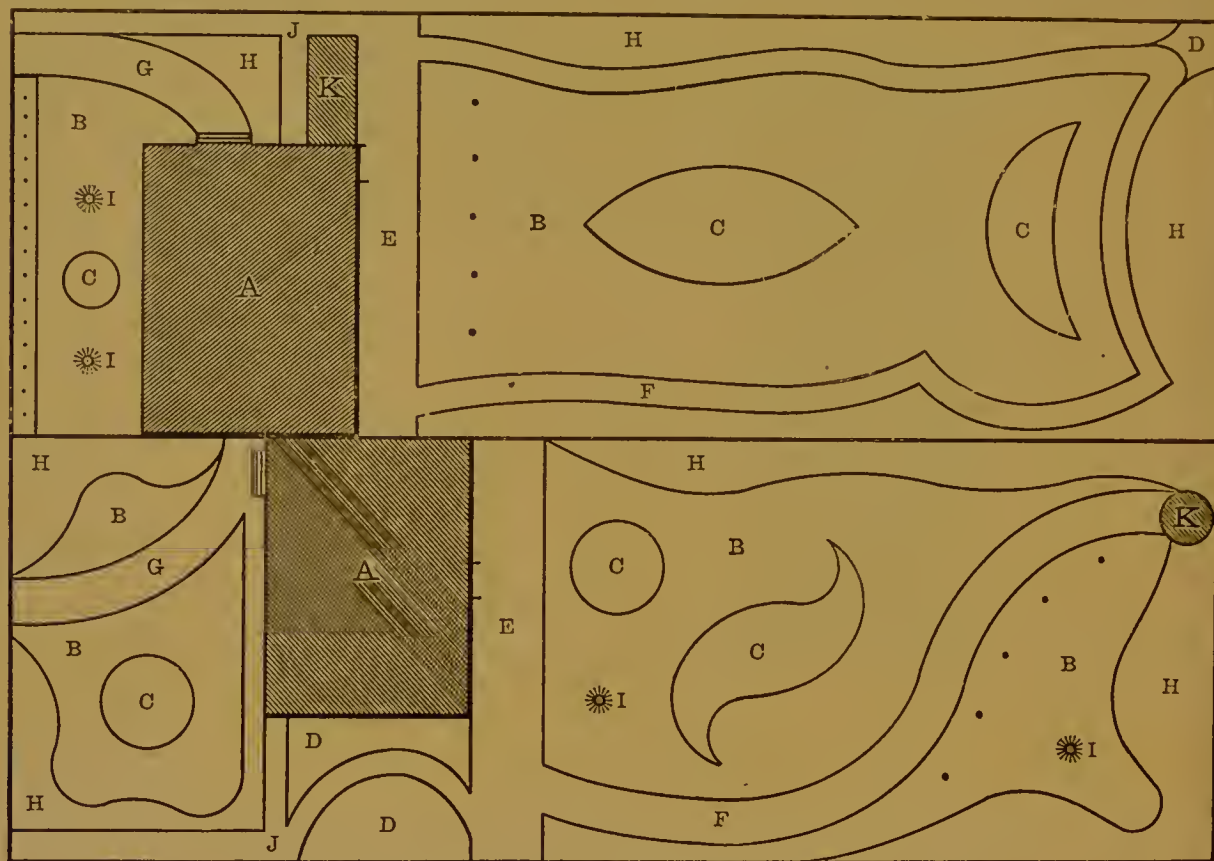


Fig. 3.—PLANS FOR SEMI-DETACHED HOUSES. (Scale 20 feet = 1 inch.)

and the tennis-ground be arranged crosswise, occupying the vacant spaces afterwards with one or two beds, according to the space at disposal.

The plan in Fig. 2 is for a much smaller garden. The chief ideas in the design have been to avoid any formality or repetition, and the garden is surrounded by a belt of shrubs, which does not detract too much from the superficial space, thus allowing of a good-sized lawn, which, with slight variations, could be adapted to form a lawn-tennis ground. A denotes the house; B the conservatory attached thereto, which, as in Fig. 1, could be heated from the cellar; c is the lawn on both sides of the house; d the shrubbery similarly situated; e points to the terrace, at one end of which there is room for a summer-house or a rustic arbour, if

other specimen trees. x shows the entrance to the house by a path six feet wide. o is for herbaceous plants in front of the shrubs. In this plan it would be a good arrangement if the conservatory were supported on arches sufficiently high to permit of a potting-shed and tool-house underneath.

In Fig. 3 we give two plans for semi-detached houses, which will be found to be quite dissimilar. A, in each, is the house; B, the lawn; C, the flower-beds (the larger, in each instance, could be planted with permanent plants, as roses); D is fernery and rockwork; E, the walk next the house, wider than the rest; F, the paths in the garden, one wider than the other by reason of not extending entirely round, as in the other instance; G, the entrances to the front doors; H, shrubbery, in one case with a

hedge dotted out next the road: 1, convenient spots for small specimen shrubs; 2, the back entrances to the houses; 3, a summer-house on each plan, one considerably larger than the other. In both instances a sufficient margin could be secured in front

feet in width. Here room cannot be afforded to attempt seclusion by a screen of trees or small shrubs, which would occupy most of the little piece of ground; and in gardens already laid out, this is also terribly narrowed and encroached upon by the

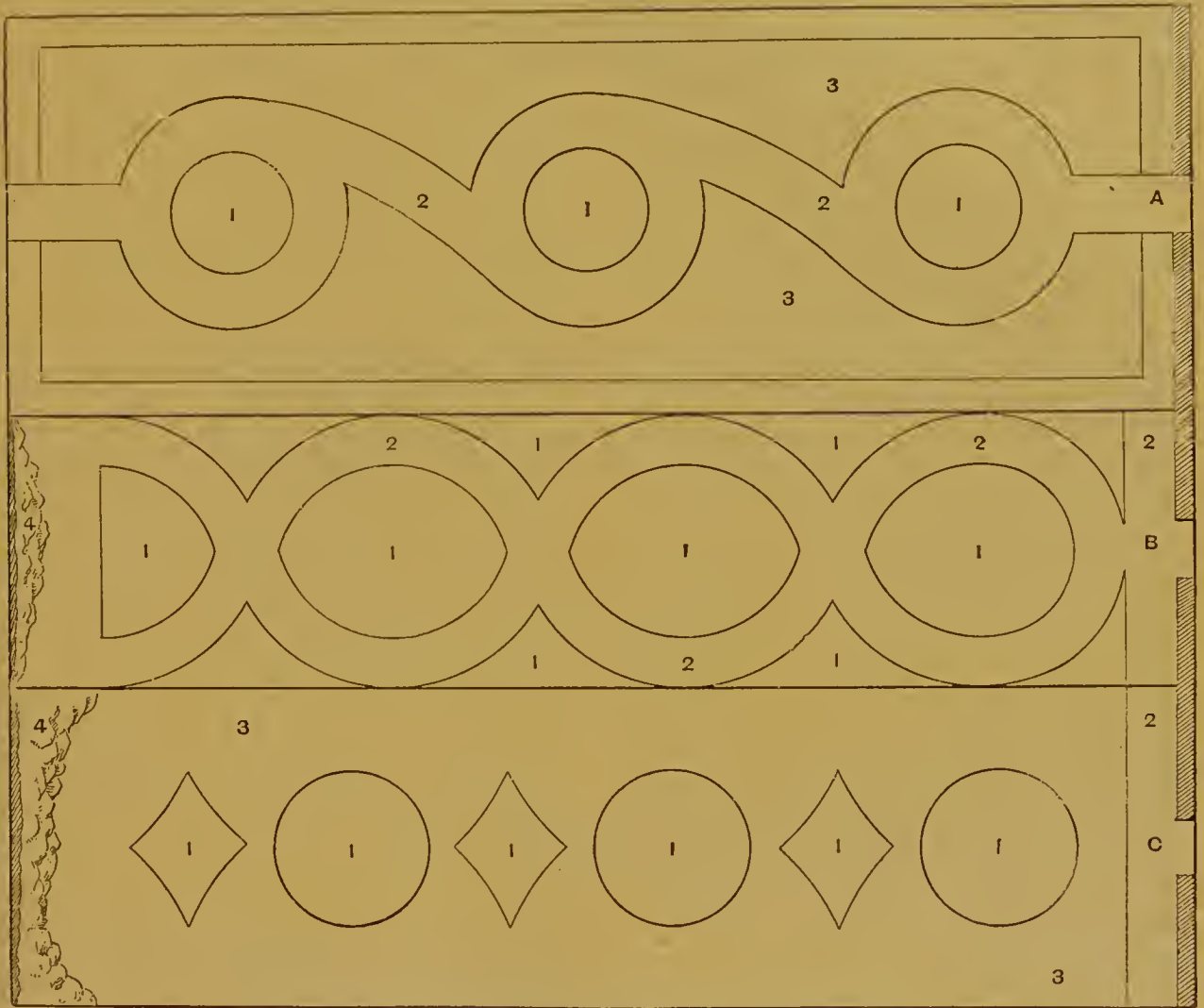


Fig. 4.—PLANS FOR BACK GARDENS IN TERRACE HOUSES.

1, Beds; 2, gravel; 3, grass; 4, shrubbery or rock-work to hide bottom wall.

of all the shrubs for a bordering of flowering plants of dwarf habit. Further information can be gathered respecting both Fig. 2 and Fig. 3 by a careful perusal of the detailed description given with Fig. 1 and a comparison with the present plans.

Terrace Gardens.—It is a harder task to make anything very satisfactory out of the back “gardens” attached to so many terrace and narrowsemi-detached cottages in the suburbs of many of our large cities. We only get a space of rather uncertain length, varying from, perhaps, eighteen to as many as thirty

eternal path all round the narrow strip of grass, which one sees everywhere. In laying out such a garden, if there are no children it is often better to have no paths at all, but have lawn all over, except where there are shrubs, or beds, or borders. Every available foot of wall-space should be covered with climbers, so as to present to the eye as little bare wall and as much vegetation as possible; and by carrying a trellis above the partition walls, a fairly good screen can be made without encroaching upon space. Only a limited amount of shrubs should be placed in the borders, if any, to leave more space for flowering

plants; and as these shrubs get too large they should be exchanged for smaller ones.

If it is not expedient to reserve the central portion for laying down in grass, but to make instead more provision for flowers and ornamental subjects, rather than adopt the usual plan we would advise one *central* path throughout the entire length, or to be intercepted in the centre of it by fixing on that spot for an effective flower-vaso. This latter plan would aid in breaking up the uniformity of a straight path from top to bottom of the garden. A circular bed could be allowed for around this vase, which should be made to look as gay as possible. Were it not for the high water-rates, another alternative would be to fix on that spot for a fountain. Such an object would be productive of good effect in that position. Four feet would be as much as could be conveniently spared in a small garden for a central path; somewhat wider should the garden be of more than average size.

Other methods may be suggested. The great object to be aimed at, in getting any satisfaction out of these small strips of terrace-house garden, is to get rid of, to get right away from, the endless repetition of a straight path all round the ground, about a yard from the wall. Small as the space is, there is no need for this wretched pattern to be always repeated in it, as we will try to show by a few examples; and this alike whether the garden is laid down in gravel or grass. To return for one moment to that question: much as we prefer grass where space is limited, it has a very serious drawback in large towns—that of not getting dry till the day is far spent. Bright and clear gravel, on the contrary, is accessible at all hours, “from early morn till dewy eve,” seasons when the garden is most enjoyable, but when grass alone must forbid its use to delicate women and children. So important to these for air, health, and happiness, is free access to the back garden in a town, that rather than deprive them of it we would lay down our pen and give up the ground to sheer gravel space and a swing. But this is not necessary; only give fair gravel space in the garden, and children may easily be trained to amuse themselves among flowers, and so to love and admire as never to wantonly injure them. Where there are children, therefore, adequate gravel walks there must and ought to be. At the same time, even a little really fresh grass, at a time when parks and pleasure-grounds are brown with drought, and the street is hot and dusty, is one of the greatest pleasures and refreshments of a garden.

The popularity of lawn-tennis leads many to attempt a court even in the narrow precincts of a suburban garden; but truth compels us to indicate that the attempt to combine the two is rather unsuccessful. The plants get constantly broken down

and injured, even though outside the regular court. It is better to take some pains with the turf, as described on p. 375, and give all up to the tennis-lawn except a few hardy shrubs round the edge which can take no injury, unless a strip of garden next the house can be entirely protected by the high netting which is a necessity in these confined localities.

The plans in Fig 4 are given merely as suggestions, and to show how easy it is, even in a small space, to get away from that intolerable monotony we have spoken of. The three designs are purposely very different, and might easily be varied in detail, even with the same main features. That shown at A readily adapts itself to rather a wide piece of ground; or by removing the border, and reducing in scale, to the narrowest. It furnishes almost the maximum length of walk in the minimum of space, in pleasing variety of line, and enables one to return at any point without retracing steps. It also allows a large-looking expanse of grass, from which the narrow flower border next to the side-walls very little detracts. The plan at B accomplishes somewhat of the same objects in a very different manner, and either this or C will suit the very narrowest gardens. The paths in B occupy more of the space, and may be either laid down so that all the other spaces, margins as well as oval centre beds, are in flower-bed and border, or all these spaces may be in grass; or the ovals in flower-bed, and the borders grass, or *vice versâ*. This plan also allows of convenient return. A pretty variety may be got by laying the centre oval *alone* in grass, with a vase in the centre.

The design at C looks best as a grass design, on which the beds are planned, the turf being carried right up to the walls. The effect of even a very narrow garden so treated is very pleasing. Of course there may be also a narrow border under the walls; but if these are well covered with green, the grass alone looks best. In all the plans the central oval or circle may, if convenient, be devoted to such a fountain or vase as already suggested. Both A and C may be made exceedingly pretty and effective in this way; but if a fountain were placed in B, it would be better to make the central part circular rather than oval—this would at the same time give a little more variety to the design.

In such small gardens as these, though more expensive, it is often worth while to lay down the paths in asphalt, which, if done well and substantially, will last for years, and does away with all trouble in keeping clear of weeds, and in rolling. Such paths are now made and finished off so as to resemble gravel as nearly as possible, and are always neat and clean, and dry rapidly after rain.

THE MANAGEMENT OF SMALL INCOMES.

AMONGST the people who find it difficult to "manage" on their incomes, there is a large majority who have to deal with an income which is, they feel, much too small to be portioned out according to the method recommended for those who have from £200 to £300 a year and upwards. The people who have incomes in the form of so much per year are to be counted by tens; while the people who have incomes in the form of so many shillings a week are to be counted by hundreds and thousands. Yet it would, for the most part, be impossible to make the rules which would be helpful for the larger incomes apply to the smaller ones, chiefly because the claim which Nature makes for sufficient food is unmistakable and imperative; and, therefore, until hunger is satisfied, other needs must be set aside.

Another difficulty which occurs in the management of small incomes, is that the amount of rent which has to be paid is very variable, and therefore very disturbing to rules and regulations. In country places, it is true, a comfortable cottage with a piece of garden attached can often be rented for 1s. a week; yet in London, and other large towns, from 4s. to 6s. per week would have to be paid for a couple of rooms. The proportion which must be paid in towns, therefore, for rent is very heavy. Four shillings a week out of an income of 20s. a week is one-fifth; and to pay one-fifth of the income for rent would be regarded as a great extravagance if paid by the owner of a large income. The management of an income, therefore, which is counted by shillings per week requires separate consideration.

There is great difference of opinion as to whether it is easier to live on a small income in the country or in a town. If, however, we inquire into the subject, we shall probably arrive at the opinion that the advantages and disadvantages of the two situations are very evenly balanced. In the country, as already stated, rents are usually low; besides which, the tenant of a cottage has frequently the use of a small piece of ground, in which he can grow vegetables and fruit; or where he can keep poultry, and get the benefit of the eggs and the birds. Also, it is not unlikely that he will have the opportunity of buying skim milk for a merely nominal price of a neighbouring farmer; and skim milk, as everyone knows, is most valuable food for children. On the other hand, wages are generally low in the country; and the countryman cannot supply his needs at a cheap rate at the large markets which are within the reach of many dwellers in towns; he either has to market at a distance from home, or to buy what he wants of itinerant vendors of goods. The townsman pays high rent, but he can buy food and clothing for

a very moderate sum; he lives the busier, harder, and less healthful life of the two, and he lives at a greater strain. Yet, if we inquire closely into the subject, we shall probably find that, so far as managing to pay the way and keep out of money difficulties is concerned, the same methods have to be practised, and the same rules laid down, by both dwellers in the country and dwellers in towns.

Paying Cash.—There are two or three rules which people who are called upon to manage on small incomes must imperatively observe, if they mean to keep out of debt, and avoid disgrace and shame. The first rule is to pay ready money for everything; purchase *nothing* that they cannot pay for on the spot, having nothing whatever to do with credit. Outstanding bills are a danger to all householders; they are an overwhelming disaster for those who have to manage on small means; they are like a weight round the neck of the individual who tries to bear up against them, dragging him down to ruin. Whatever happens, therefore, whatever privations have to be endured, whatever self-denials have to be practised, ready-money payments, and ready-money payments only, must be made by all individuals thus situated, if any sort of a stand is to be made against misfortune. Doubtless there will be abundant temptation to neglect the rule, but the slightest deviation from it is like beginning to run down a steep hill. We need not begin to run at all, unless we like; we can walk steadily and quietly to our destination; but if we once start on a run, the probability is that we shall not be able to stop until we reach the bottom, which in this case will mean ruin, while our pace will grow quicker and more dangerous the farther we go.

Saving.—Another rule to be scrupulously observed by those who wish to manage on small means, is to be resolutely determined to live within the means rather than up to the means, and to make a regular saving, no matter how small, as a preparation for a rainy day. It seems hard to lay the greatest stress upon the necessity of saving where saving is most difficult; and yet we may be quite sure that the more difficult it is to save, the more the saving is certain to be needed. Sooner or later circumstances are sure to arise in which the possession of a little money may mean independence, safety, and almost life. Yet the only way this possession can be honourably obtained is by putting it aside gradually beforehand.

Co-operation.—Fortunately, in these days there are many aids to thrift which can be used by

those who want to save money out of a small income. One of the most valuable and helpful is co-operation. Co-operation means working together; and the idea of true co-operators is that all who need help should join together to help each other. Sometimes this is done by the workers who belong to a special trade joining together to form trades' unions, which shall regulate wages, hours of labour, and similar details. With co-operation in this form householders, as householders, have nothing to do. There is, however, another form of co-operation, specially intended for them, which is directed towards enabling people who have not much money to spend to get the utmost value for their money, by joining a co-operative society and dealing at co-operative stores. Everyone who likes can join these stores by paying a small subscription; and, having done so, can buy what is required for household and personal needs at a fair price, and then have a share of the profits of the trade done. Thus it follows that the more any individual has to spend, the larger the amount of profit he gets, and the larger the sum on which he draws interest. Surely all will agree that this is a very easy way of saving money.

At the present time the co-operative societies are so numerous, and co-operative stores are worked so extensively, that there are comparatively few places where this method of saving cannot be adopted by all who will take the trouble to inquire for them. Co-operative stores are, it is true, best known and most used in the north of England; yet even in the south they are on the increase. In almost all large towns there is at least one store; and there are stores also within reach of many dwellers in country places who have never thought of inquiring for them. People who want to be thrifty, therefore, ought certainly to be on the look-out for these stores, and to deal with them when it is possible.

In making inquiries in this direction, it is most necessary, however, that people should be on their guard to avoid mistaking a sham co-operative store for a real one. There are in these days many "co-operative stores" which call themselves by this name, but which belong to private individuals or private companies, and which differ in no respect from ordinary shops. The true co-operative stores, it should be understood, *share profits* with their customers. Whenever any article is bought, they hand to the customer not only the article in question, but also a check, the value of which represents the amount of money spent. These checks are to be carefully saved; and at the end of a quarter of a year they are to be returned to the store, when they will entitle the owner to interest on money spent, and to a certain amount of the profits made. If the holder of a number of checks were a shareholder of

the store—that is, if he had paid the subscription on entering which constitutes membership—he would receive full interest on all the money which he had laid out, and sometimes this interest amounts to as much as 3s. in every pound. But if he were not a shareholder, a small sum would be deducted to pay working expenses! The deductions thus made would, however, be put together until the amount of the subscription was collected, when the purchaser would become a shareholder. The merely nominal co-operative stores do not thus share profits; they simply sell goods for money in the ordinary way. Yet it is easy to ascertain whether or not a store which calls itself co-operative is really so. If the purchaser is in doubt on the subject, he needs only to send a letter with a stamped envelope to the Secretary of the Central Co-operative Board, City Buildings, Corporation Street, Manchester, asking whether such-and-such a shop is truly worked on co-operative principles, and he will shortly receive a reply which will decide the matter for him. If the store is truly co-operative, it will be greatly to his advantage to join it. By doing so he will not only benefit himself, but he will be helping a movement to benefit all.

Clubs.—Some people like to save money by the aid of clubs, provident and building societies, sick-clubs, and even burial clubs. The rule in these clubs is that the person belonging thereto pays a certain sum a week, less or more, according to the age at which he enters, and that then he receives so much a week should certain contingencies arise—that is, the sick-club pays so much a week in case of illness; the provident club pays so much when old; and in the burial club he receives a lump sum on the death of a member of the family to pay for the funeral. Sometimes these clubs are excellent; sometimes they are a fraud, taking the poor man's earnings to rob him of them, and make his thrift end only in disappointment. This is very cruel, because it is hard to be thrifty when people have very little to begin with.

The excellence or want of excellence in clubs depends almost entirely upon the management. If the managers are honest and wise, they may confer untold blessings upon the members of their society. As a rule it is well to be afraid of a high rate of interest, because high interest generally means unsafe investments. People who join local provident societies should make strict inquiries about the management, and they should be careful to trust only persons of known and undoubted integrity. In badly managed societies a large part of the money paid goes to collectors and agents; in honestly managed societies it goes to the members. By comparing the advantages stated with those offered by

other societies, it would be easy for anyone to find out whether the terms were fair and reasonable.

Building Societies.—Another way of saving frequently adopted by the prudent and thrifty is to join a building society and buy the house one lives in. Well-managed building societies often prove a boon to economical people. They have been the means of inducing numbers of people to save who would never have done so without them. Many a man who is now comfortably off, who has a nice little sum safely invested, and who enjoys all the advantages belonging to that condition of things, owes his position to the fact that he was once induced to join a building society. By the arrangement thus made he paid his rent monthly instead of quarterly, soon gained the pleasant consciousness of having saved a little money, and after a time found that the house he lived in was his own. The rent had to be paid no longer, but the habit of saving thus formed was continued as a matter of course, and a competency was the result.

Viewed simply in the light of an "investment" of money, building societies are not to be specially recommended. Usually the money is not lent at a very cheap rate; and when it is put away, it yields only a low interest. But looked at as inducements to people to save small sums who never would or could save in any other way, these societies are invaluable. The very fact that both in clubs and building societies the payment of a fine is exacted if the money is not duly paid, helps to keep up regular payments; the money saved is looked upon as part of the ordinary expenditure of the household, and its loss is not felt.

Savings.—One of the best and most convenient ways in which savings can be made by householders is through the Post Office. The Post Office Savings Bank is within the reach of everyone in the United Kingdom, and it is pleasant to know that there are hundreds of thousands of people availing themselves of it, while the number of these individuals is increasing yearly. It is true that the interest given by the Government is not much, but the compensation is that the security is absolutely safe, and that there is not the slightest risk of loss. After all, the great point to aim at in making small savings, is to get the money put away at all. If this object can but be effected, savings seem to grow while we sleep, whether the interest is large or small. By the help of the Post Office, saving is made most easy. Money can be put away at any time or to any amount up to £50, and due notice being given, it can be drawn out without any difficulty. The following are the arrangements under which the deposits may be

made:—At any Post Office Savings Bank deposits are received of any sum not less than 1s. or more than £50 in one year. When the amount reaches £1, interest at the rate of 6d. a year on each pound is paid. Not more than £50 is allowed to be paid thus in a year; and not more than £200 is allowed to be paid in all. Nevertheless, if the savings in one year should exceed that sum, or if, owing to the full amount being paid in, further savings cannot be invested, the Post Office will receive instructions to put the money into Government stock. This stock is acknowledged to be the safest investment known. It is the investment chosen by all rich people who want to be secure from risk, because there is no danger of loss in it. A small charge is made for thus removing savings from the Post Office. This charge for amounts not exceeding £25 is 9d., exceeding £25 and not exceeding £50 it is 1s. 3d., exceeding £50 but not exceeding £75 it is 1s. 9d., exceeding £75 but not exceeding £100 it is 2s. 3d. The price of the stock also varies somewhat, but what the price is at any period can be ascertained by inquiring at a post office. On each £10 of stock thus bought interest is paid every six months, the amount depending on the kind of stock bought; and this interest is received for the investor by the Post Office free of charge.

Of course there are people who find it difficult to put as much as a shilling in the bank at one time. To help these people it has been arranged that at every post office in the United Kingdom forms may be obtained, free of charge, on which twelve penny postage stamps can be fixed; and when the form is thus filled with twelve penny stamps, it will be taken instead of a shilling at any Post Office Savings Bank.

Annuities and Insurance.—A very sensible way of saving money for people of small incomes is by the purchase of an annuity. By this means it is possible, by paying down one's savings in a lump sum, to secure the payment of a yearly sum for life; or, if preferred, it can be arranged that the yearly sum shall commence at any age which may be mentioned. Thus a man between thirty and thirty-one years of age may purchase an annuity of £10, to commence when he reaches the age of sixty, by paying down the sum of £24 3s. 4d., or by paying every year, till he is sixty, the sum of £1 8s. 4d. A woman of the same age can purchase an annuity of £10, to commence when she reaches the age of sixty, by the payment of a lump sum of £32 8s. 4d., or the annual payment of £1 17s. 6d. The reason why the two sexes pay different sums is, that it has been found that a woman's expectation of life is better than a man's, and therefore a woman

has to pay rather more than a man for the same annuity. At the same time, if the person thus purchasing an annuity is willing to pay a somewhat larger sum, it is agreed that the money laid down shall be returned if the person dies before sixty, or is unwilling or unable to keep up the annual payments until he is sixty. The purchase of an annuity is an excellent way of helping those who are dependent on us, and whom we wish to make absolutely secure from want.

One advantage of putting money saved into the Post Office is that the Government will take charge of the money belonging to women as well as men. Even married women may deposit money in the Post Office with safety, and so long as this money is entered in the depositor's name only, it would be regarded as her separate property, and no one could touch it apart from her. This is a very important consideration for women. Thus far all the great clubs refuse to admit women to a share of their benefits; they will pay a man something when his wife dies, but they will not allow her to pay in so much a week and thus become a member. The consequence is that working women are beginning to think of forming trades' unions and provident societies of their own. It is, however, very hard for them, and it would be much better for both if men would let women who are compelled to work for their living join their clubs, and enjoy the advantages belonging thereto.

The very best way of saving money to provide for those who would otherwise be left destitute, is for the bread-winner to insure his life, so that at his death a sum of money may be paid to those whom he leaves behind him. There are many societies in connection with which a life insurance may be effected, and in choosing a society the great thing is to be sure that it is a sound one. Apart from the insurance societies, insurances can be made in connection with the Post Office by any man or woman in sound health. Persons who wish to find out on what terms they can insure their lives, or buy an annuity, or put away savings, or purchase Government stock, can, on applying at any post office, obtain tables which will give full information.

Burial Clubs.—There is one way of trying to provide for the future which is very much approved by some of those who have small incomes, but which is particularly unfortunate. At the present time there are thousands of people who have very small incomes, who pay regularly at stated periods a subscription to a burial club, with the understanding that when the person on whose account the money is paid shall die, a handsome sum shall be forthcoming to bury him or her, and to buy black for the family.

Sometimes it happens that when a new baby comes into a home, the father and mother at once enter the child's name in a burial club; and cases have been known in which the burial club subscription has been paid for years for a person who has lived to a good old age, and been hale and hearty most of the time. If the money thus saved for the interment of the individual were put into the Post Office Savings Bank, it might bring comfort during life, and leave a little sum for burial into the bargain. Undoubtedly it is a fact that if a child were to die in early infancy, and the mother had entered his name in a burial club as soon as he was born, she would be in the receipt of a much larger sum than could possibly accrue to her through putting money in the savings bank and taking it out quickly. Yet savings are wanted for the living, not the dead; and it would be much more satisfactory to have money to educate a child, clothe him well, and feed him, than to bury him.

A chief reason why burial clubs are unthrifty and to be avoided, is that many of them make it a rule that a certain proportion of the sum received shall be spent on funeral expenses and on mourning garments. In this way the notion is perpetuated that we pay honour to the dead when we bury them with pomp and circumstance, and spend a good deal of money on burial obsequies. The consequence is that again and again it happens that the people who can least afford it, who are already in money difficulties arising out of the costliness of illness, and have, perhaps, through the death of the bread-winner lost their means of support, feel it their duty to waste their money on buying expensive un-serviceable clothing which will very soon look shabby, and on hiring pompous funeral-cars and mourning-coaches drawn by horses with flowing tails. Such trappings are a relief of barbarism; they do no good to the loved ones who have gone before us, and they only distract the attention of the mourners. It has been already stated that rich people, who could easily afford to pay for such things if they were worth having, are gradually falling into the habit of not using them. "Handsome funerals" are becoming more and more uncommon; the bereaved seem to long for simplicity of arrangement, and to dread display. Surely those who can hardly afford such expenses might follow the example thus set them. In a great many cases the reason why they do not is, that through belonging to a burial club they have received a sum of money, and are required to devote a certain portion of it to funeral expenses. In a few weeks they may be harassed and anxious about money difficulties; but now, at least, they have money in their hands, which must be thrown away upon cars, and wreaths, and

unserviceable crape. This is the expense for which the burial club provides, and this is the foolish custom which only the brave and sensible dare defy.

Into every household, sooner or later, Death makes his unwelcome entry. When means are small, he usually comes accompanied by extra difficulty and worry. These cannot be avoided; they belong to the necessities of the occasion. But in the midst of their grief economical people might use their common-sense, and refuse to be led into lavish expense, which, so far from being a mark of love and sorrow, is only a piece of uninitigated humbug.

Wise Spending.—To manage a small income well, it is quite as necessary to give thought and care in order to spend well, as it is to give thought to saving. The less money we have, the more we need to get the most out of it, and the more we ought to be afraid to buy cheap things because they are cheap. Because we have little to spend, we ought to pause, consider, and reflect before we lay out even a penny, so that we may lay that penny out to the best advantage. On this account it is a help to go to a good shop, and also to buy of such things as will keep, a quantity at a time, and not in small parcels. It is particularly hard, that the people who have the least money usually pay the highest price for the things they buy, and because they buy in dribbets they get goods of inferior quality. If we could imagine such a thing as that a housekeeper had to buy a pound of tea in farthings' worths, we might be perfectly sure that she would pay fully twice as much for it as if she bought it by the pound. By all means, therefore, a mother who has to practise strict economy should try to arrange her purchases so as to buy in quantity (of such things as will keep), and to buy of good quality. Also she should determine not to give way to prejudice, and fancy that everything that is new is poor. There are in these days new ways of living, new sorts of food, and new methods of cookery, to be met with on all sides, and the only persons who will never gain any benefit from them are the persons who scorn them and need them most.

The problem of "How to Manage on a Small Income" is a very difficult one; no one knows how difficult it is excepting those who have tried it. Also the most valuable suggestions on the subject are to be gathered from those who have learnt from experience. It is well worth while, therefore, when we have the opportunity, to study carefully the methods which have been adopted by people who have mastered the problem. Fortunately, in this instance actual experience can be studied by all.

Some time ago there appeared in *The Nineteenth Century* an article entitled "How to Live on £700

a Year." It was written by someone who evidently felt there was no doubt whatever, that to live on £700 a year was very hard work. He imagined a young couple, married, with one child only (what they would have done if other children had appeared on the scene, the writer did not say), and having to live in London on the income named: and he tried to show how they might divide their money to the best advantage. He supposed that they would have to live in a fashionable part of the town, to keep a number of servants, to dress according to the mode, and to entertain their friends occasionally. But to do this, he said, they would have to economise here, and to do without there; to skimp, save, and spare to such an extent, that he represented them as living a most restricted, narrow, and mean life, in which comfort and well-being were sacrificed to appearance, and happiness and usefulness were quite in the background.

A Really Small Income—The article just referred to was widely read, and caused much discussion. Amongst others who read it was a lady named Miss Miranda Hill, who had worked for many years amongst people whose income was so many shillings a week. This lady said to herself, "These people have difficulty in managing on £700 a year." Yet how many good and happy homes there are in England, where the income is hardly a tenth of that sum. Many working people manage on thirty shillings a week. They live simply, and yet nobly. Their lives are crowned with the highest blessings—simple reality, steadfast industry, the sense of usefulness, manly independence, the joy of family ties, and of the need and power to make sacrifices for these. How do these working people manage?"

Thinking that the answer to this question would, if it could be obtained, be useful and helpful to others similarly placed, Miss Hill determined to inquire amongst her working friends, and find how they managed. There were several who could have given her the information she wished, but there was one home especially, whose bright cheerful aspect and well-cared-for children she had known for years. The father was a skilled workman, and he had regular employment in London: he earned thirty shillings a week: he occupied two rooms: he was married and had five children, and neither wife nor children had ever suffered stint, mentally or bodily. To this man Miss Hill applied. She told him she wanted to learn how a working man with a family would manage on thirty shillings a week: and that, if he would permit it, she should make his experience public. He did not object, and with her help he drew up a statement of his expenditure as follows.

	Per week.	Per year.
	£ s. d.	£ s. d.
Meat - - - - -	0 4 0	10 8 0
Bread, 10 loaves - - - - -	0 2 3½	5 19 2
Flour, 2 quarters at 6d. - - - - -	0 1 0	2 12 0
Vegetables; 18 lbs. Potatoes - - - - -	0 1 0	2 12 0
Other vegetables - - - - -	0 0 4	0 17 4
Butter - - - - -	0 1 0	2 12 0
Fruit - - - - -	0 1 6	3 18 0
Milk, 1½d. per day - - - - -	0 0 10½	2 5 6
Tea, ½ lb. - - - - -	0 1 0	2 12 0
Cocoa, ½ lb. - - - - -	0 0 6	1 6 0
Sugar, 4 lbs. - - - - -	0 0 10	2 3 4
Soap, 1½ lb. - - - - -	0 0 6	1 6 0
Soda, Starch, Blue - - - - -	0 0 1½	0 6 6
Candles - - - - -	0 0 1	0 4 4
Paraffin, ½ gallon a fortnight - - - - -	0 0 3	0 13 0
Coal, 1 cwt. - - - - -	0 1 3	3 5 0
Beer, 3 quarts at 3½d. - - - - -	0 0 10½	2 5 6
Rent - - - - -	0 5 6	14 6 0
Boots for whole family - - - - -	0 1 8	4 6 8
Clothes for the Husband - - - - -	0 1 0	2 12 0
„ „ Wife and Children - - - - -	0 2 0	5 4 0
School Fees - - - - -	0 0 4	0 17 4
Provident Club - - - - -	0 1 6½	4 0 2
Medical Attendance for Wife and Children - - - - -	0 0 3	0 13 0
	<u>1 9 8½</u>	<u>77 4 10</u>
Balance out of 30s. a week - - - - -		0 15 2

It may be well to explain that this family lived in two rooms in a street within reach of a large meat market, where "beautiful meat could be bought at 3d. or even 2½d. per pound." On the other hand, the club money came to 1s. 6d. per week, because the husband did not join the club till he was forty-one years of age. He also made an arrangement with the club doctor to attend the wife and children whenever they needed it for 3d. a week for the wife and 1½d. for each child.

This is no mere theoretical case. Every figure given is from literal and actual experience. Another case is that of a family, consisting of husband, wife, and two children, living on the outskirts of a large town, where they were far away from large markets, yet not sufficiently in the country to pay low rent. The husband's wage was £1 a week, and he was able to hire a small cottage from his employer, free from taxes, for 5s. per week; also he had a quart of skinn milk every day.

This was his weekly expenditure:—

	s. d.
Rent - - - - -	5 0
Firing and Light (1½ cwt. coal, 1s. 6d.; wood, 6d.; oil, 3d.) - - - - -	2 3
Vegetables (a peck of potatoes, 10d.; others, 2d.) - - - - -	1 0
Bread and Flour (1 peck and 1 quarter of flour; yeast, 2d.) - - - - -	2 0
Meat - - - - -	4 0
Butter - - - - -	1 0
Clothing, Husband - - - - -	1 0
„ Wife and Children - - - - -	1 0
	<u>17 3</u>

From the £1 per week there was now left 2s. 9d. This was carefully laid away for four weeks, and once a month there was made a purchase of groceries and things that would keep. These monthly purchases would vary. One month they were as follow:—

	s. d.
1 lb. Tea - - - - -	1 8
1 lb. Coffee - - - - -	0 10
1 lb. Cocoa - - - - -	0 11
6 lbs. Brown Sugar - - - - -	1 6
6 lbs. Lump Sugar - - - - -	1 6
4 lbs. Treacle - - - - -	0 11
1 bar of Soap - - - - -	0 9
7 lbs. Coarse Oatmeal - - - - -	1 1
	<u>9 2</u>

Another month they were:—

	s. d.
1 lb. Tea - - - - -	1 8
6 lbs. Sugar - - - - -	1 6
7 lbs. Oatmeal - - - - -	1 1
7 lbs. Split Peas - - - - -	1 0
2 lbs. Rice - - - - -	0 5
2 lbs. Tapioca - - - - -	0 5
2 lbs. Sago - - - - -	0 5
1 bar of Soap - - - - -	0 9
14 lbs. Soda - - - - -	0 6
1 box of Starch - - - - -	0 4½
½ lb. Blue - - - - -	0 4½
1 box of Blacklead - - - - -	0 6
	<u>9 0</u>

One month 7 lbs. of split peas, price 1s.; or 7 lbs. of haricot beans, at 1s. 4d., would be obtained; but in every case the effort was made to bring the amount paid within the sum laid aside by a few pence, and this saving was put at once into the Post Office Savings Bank.

This case, also literally and truly reported, is not only interesting as a record of a very small income indeed, but because the mother of the family so clearly saw, and so admirably put into practice, those principles which alone can enable a housekeeper to make the most of her money.

Saturday Marketing.—A great many of those who have to manage on a small income, think that it is wise to do the most of their shopping on Saturday night, because then they buy food cheap. The housekeeper just mentioned, however, who succeeded in keeping a happy home on 20s. a week, was strongly of opinion that this notion was a mistake. She acknowledged that so far as perishable articles were concerned, such as meat or fish, it was often possible to secure bargains by marketing late on Saturday. Yet, on the other hand, there was on these occasions a temptation to buy what one did not want, and to buy unadvisedly, which more than counterbalanced the gain. She declared that the only way to manage on a very small income was to

pay ready money; to calculate purchases before making them; to buy goods that would keep in quantities, so as to buy them economically; and to be determined to keep a little ahead. Also she maintained that it was most necessary for a housekeeper who wished to accomplish this difficult task, to be skilful with her needle; to be acquainted with economical ways of preparing food; to be energetic, industrious, and orderly; and last, but not least, to have the co-operation of every member of the family. The difficulty of managing a household on a small income becomes insuperable, when all the members of the family do not work together. Economising is heart-breaking work, when one individual obstinately pulls down the fabric which the others are courageously trying to raise.

One word more remains to be said to housekeepers who are trying to manage their income successfully, and who find the task well-nigh impossible. It is this:—It never does any good to sit down in despair because the purse is bare, and the accounts cannot be

made to balance comfortably. When money troubles stare us in the face, there is one of two methods to adopt: either we must diminish our outgoings, or we must increase our incomings. There are many instances—for example, where the family is large, and a number of persons have to be fed and clothed—where economical living is practised to the utmost, and still it seems to fail. Under these circumstances it is worth while for the members to pause, and consider whether the opposite plan cannot be worked, and whether the income cannot be *increased* somehow? In these days there are numerous ways in which money can be earned by capable industrious persons who are willing to put their shoulders to the wheel; and if some of these could be tried, relief might be gained, and independence be secured. Patient endurance of poverty is not by any means the highest virtue. No credit accrues to us if we simply *bear* what we might *cure*; and those are deserving of high honour, who by means of honest industry force their way through poverty to independence.

PUDDINGS AND SWEETS.

WE next come to a different class of puddings altogether—viz., those which ladies generally delight to make, and children to eat; for, remember, we have called attention before to the fact that there are many ladies who would take an immense amount of trouble in making a chocolate pudding, or an ice pudding, who would never dream of attempting to make a snipe pudding, though the latter would be infinitely preferred by their husbands, brothers, uncles, and male guests generally (to whom might be added a good many stout middle-aged ladies). But then the chocolate pudding looks so pretty; and, as we have reminded you, its praise will gratify their vanity, while the snipe pudding would have gratified the guests' stomachs. Puddings served as sweets can be divided into classes.

Plum Puddings.—First of all there is that large class, admitting almost any amount of variety, known as plum puddings. These ascend or descend, as the case may be, in a scale commencing with the rich Christmas pudding, and terminating in the school pudding as served some sixty years ago in those establishments caricatured by Dickens in "Nicholas Nickleby." Perhaps one of the best plum puddings that can be made, is what may be called a pound pudding. It is a very easy recipe to recollect, as you have to put in 1 lb. of *everything*—viz., 1 lb. of very fine breadcrumbs or flour, 1 lb. of sugar,

1 lb. of suet, 1 lb. of fruit (consisting of raisins or currants), and 1 lb. of eggs. Eight eggs are supposed to weigh 1 lb., but when the eggs are small you should allow nine.

There is one important addition which must be made to every plum pudding, and that is the spice and candied peel. Of course a great deal of the richness of the pudding depends upon the amount of candied peel added, but as a rule half a pound of peel to the pound of every other kind will be amply sufficient. In adding spice, the danger is rather that cooks are apt to put in too much; the consequence is that when the pudding is cut, or, indeed, when it is taken out of the cloth, there is a smell too much suggestive of a chemist's shop. The best spice is nutmeg; this is far preferable to mace.

In a good plum pudding the object should be to taste the fruit—i.e., raisins and currants should impart their flavour. Consequently if you get nicely flavoured raisins, you must necessarily get a nicely flavoured pudding. Muscatel raisins are very superior to ordinary raisins; but then, on the other hand, of course they are very much dearer. These muscatel raisins are generally sold in bunches for the purpose of being served for dessert, though the class of persons who will eat almonds and raisins after a good dinner is rapidly dying out. It will be found a great saving in buying muscatel raisins for the purpose of making a pudding, to tell your

grocer that you only want the loose ones; he will remove the bunches and sell the loose ones that have dropped off for about half the money. The raisins should be washed and then stoned. If you employ children to "stone the raisins," you will require nearly double the quantity, as nothing will prevent them from sucking their fingers, and of course a raisin will stick to these every now and then. Currants must be also washed, picked, and dried. The drying is more important than people think for; and picking the little stalks out of currants, though tedious, is necessary in making rich Christmas puddings. You can also add a few pounded bitter almonds—only don't over-do it. A quarter of an ounce of bitter almonds is more than enough for a big pudding. A few drops of essence of almond will answer the same purpose, only it is very apt, without care, to get all in one place.

There is one ingredient which we have purposely omitted to the last, and that is the addition of a little brandy. Unfortunately there is a great deal of strong feeling on this subject in the present day. Some maintain that the addition of wine, and still more spirits, for cooking purposes, is unnecessary. There is no doubt, however, that the addition of a little brandy to a Christmas pudding is a very great improvement. A quarter of a pint of brandy will be amply sufficient for a pudding made on the basis of one pound each of the principal ingredients. A very good substitute for brandy, and a cheaper one, is rum—indeed, for all cooking purposes rum is, if anything, superior to brandy, and is only half the price. The rum can be used in a smaller quantity, and mixed with a little sherry.

This Christmas pudding can gradually be made plainer and plainer by decreasing the quantities of fruit and eggs and candied peel, and increasing the quantity of flour, suet, and breadcrumbs.

These puddings can be boiled either in a cloth or a mould. A Christmas pudding looks more seasonable boiled in a cloth. When it makes its appearance on the table, it should have the appearance of a large speckled cannon-ball. Let us trust that the majority next Christmas may be able to have more than poor Bob Cratchit's half of half a quarter of brandy to ignite in honour of the day.

Eggs for Puddings.—Now in breaking eggs for all kinds of puddings, there are one or two points to be borne in mind. First of all, break each egg separately into a cup by itself. One bad egg will spoil fifty; therefore if you, through carelessness, indifference, ignorance, or stupidity, as many women will persist in doing, break the eggs into the same basin one after another, you run the risk of either having to throw the whole lot away, or of completely

spoilings whatever dish you are making; therefore always take the precaution to break each egg into a cup by itself, and as soon as you are sure it is a perfectly good one, and not before, turn it into the basin with the rest.

The next point with regard to eggs, is to remember that you will never get their full benefit unless you beat them up *thoroughly*. When eggs are only half beaten, when they are mixed with the other ingredients they cook in flakes, and the benefit is, to a great extent, lost. Eggs, to be thoroughly beaten, should drop from a fork like water, and not hang from it like the saliva from a dog's mouth when he sees people eating, and is not offered any himself. It will be found that eggs are beaten up much more easily when a little drop of boiling water has been added to them. A very little must be added at a time, or the egg, when the water is added, will set. Eggs should always be beaten up till they froth; and should there be a few lumps which hang from a fork when passed through it, while all the rest is well beaten, these lumps should be removed.

Pudding - Cloths.—An important point in regard to puddings is the cloth. A good pudding deserves a new cloth; and when pudding-cloths are used a second time, they should be rinsed and boiled in plain water, but neither soap nor soda should be used in cleaning them. Many cooks, however, insist on sending the cloths to the wash in the ordinary manner: their puddings are the worse for it. The cloth should first of all be well buttered, and then floured. The cloth should be tied tightly in two places, but a little room should be allowed for the pudding to swell. It is not an uncommon thing sometimes to find a burnt spot on a plum pudding; this is owing to the cloth having stuck to the bottom of the saucepan. By simply placing a saucer at the bottom of the saucepan all danger of this is avoided.

It would be quite impossible to give even a quarter of the recipes for puddings in the space at command, but the writer may mention that "Cassell's Shilling Cookery Book," recently published, contains a greater number of recipes for puddings than any other cookery book ever written.

Cabinet Pudding.—Puddings may, however, be divided into classes, and one very large class is that of which "cabinet" pudding is a type. Let us describe how to make an ordinary cabinet pudding, and then leave it to the ingenuity of the cook to make a large variety of puddings on the same principle.

First of all, before commencing a pudding, we would call attention to two articles that are abso-

Intely necessary to be kept always in the store-closet for the purpose of ornamenting a very large variety of sweets. We refer to crystallised cherries and crystallised angelica. Angelica can generally be bought at a triflo over one shilling per pound, and preserved cherries for about the same price; at any rate, preserved cherries should never cost more than 1s. 6d. per pound. It is wonderful how long a pound of each of these will last in a household, and what an *enormous* improvement they constantly make to dishes that would otherwise be plain and common-looking. To illustrate this point, let us suppose that you have these useful little ornamental accessories in the house, and you are going to turn out a small tin of apricots. You simply open the tin, turn it out into a glass dish, and then pile up the apricots in a pyramidal shape with the convex sides uppermost, taking a lesson from the strawberry-women by putting the best at the top. This dish is now plain and wholesome; but what an alteration in its appearance can be made for what the showman would call "the ridiculously small sum of a halfpenny," by using the cherries and angelica in the way we described in the article upon tinned and preserved eatables! What a change has come o'er the dish! which now looks handsome enough to be served on a well-laid table at a ball-supper; and yet this change has been worked at the minimum of cost and the minimum of trouble.

We will now return to the cabinet pudding. Take an ordinary round white pudding-basin, as this will make a prettier pudding than the most elaborate copper mould you may possess. Butter the basin thickly. Now take the angelica and the cherries; press the cherries on a plate with the finger until, so to speak, they squash out flat to the size of a sixpence. Now, if possible, have a cutter that will cut out little stars. You can buy a whole box of cutters for about a shilling, which will cut stars and leaves, &c., but preserved cherries cut best into stars. The green angelica, owing to its size, will cut into any shape; little curved leaves, about an inch long, will be found to be the best. Now get a couple of dozen red stars and an equal quantity of green curved leaves, and stick these in the butter on the basin, selecting the largest and brightest to go in the bottom of the basin, which will form the top of the pudding when it is turned out. The bottom of the basin should be rather thickly studded with these red and green ornaments. Next take two or three stale sponge-cakes or finger-biscuits—better still, some macaroons and ratafias—and we can soak these in a little sweetened spirits composed of half rum and half brandy. The "very height of acme" is gained by soaking these macaroons and

ratafias in liqueurs, such as maraschino, yellow chartreuse, noyeau, &c. Now make a rich eustard, made with about six eggs to a pint of milk. Place the cake—macaroons, ratafias, &c., as the case may be—in the mould, leaving quite half vacant for room to swell; pour on the custard, and then steam the pudding till the whole is set. When it is set, even if served hot, wait a few minutes before you turn the pudding out. For this purpose place the dish upside-down over the basin, then reverse both carefully, in order that you may run no risk of breaking the pudding.

This pudding can be eaten either hot or cold. When macaroons and ratafias are soaked in liqueurs such as we have mentioned, it is best cold. It is the sort of dish well calculated to raise the jaded appetite of a wealthy epicure. Of course, the red stars and green leaves appear on the surface of the round mould, the base being a pure white—or, at any rate, a yellowish-white. If a little cream be added to the milk in making the custard, the colour is greatly improved. When this dish is taken cold, it is best turned out on to a silver dish of oval shape, the bottom of which is covered with a piece of white paper in which a border has been stamped round the edge. The base of the pudding should be ornamented with crystallised fruits. If you wish to keep the same colours—red and green—you can place preserved greengages alternately with crystallised red pears. But a very pretty substitute will be found in alternate green and yellow; and for yellow ornaments, there is nothing equal to crystallised apricots.

We have mentioned this pudding as a high-class type of a variety of similar puddings. Any pieces of stale sponge-cake can be used for the purpose, and can be soaked with a little sherry-and-water; indeed, as far as that goes, they need not be soaked at all. A very pretty, cheap pudding of this type can be made by sticking ordinary raisins in a buttered basin, using pieces of stale crusts of bread instead of cake. The bread can be soaked in a little sugar-and-water, flavoured with a few drops of essence of almonds. Common custard can be made with one or two eggs, assisted with a little corn-flour; and the whole can be flavoured by rubbing a dozen lumps of sugar on the outside of the peel of the lemon. It is wonderful what a powerful flavour can be obtained in this way, and what a lot of deficiencies it will make up for. It is a good maxim for a cook to bear in mind, that "*zeste* of lemon will cover a multitude of sins."

We will not attempt to run through the variety of puddings made on this principle. Currants are sometimes used; and the fact that they settle at the bottom of the basin, probably suggested the

ingenious idea of calling the dish "black-cap pudding." The latter is, however, quite as often a light batter pudding, with currants used in the same way.

Farinaceous Puddings.—Another very large class of puddings may be described generally as farinaceous puddings. We refer to rice, tapioca, sago, &c. The first point to be borne in mind in all these puddings is, "Wash and be clean." It is wonderful what a lot of washing some of these materials require; and the best thing is to use several waters, and to go on till the water ceases to be cloudy. It is very nasty, at the bottom of a pudding, to see any black grits or dregs. Probably all of you well remember on one or two occasions in your past lives, how very unpleasant the last spoonful was of a glass of barley-water! This simply means that the cook would not take the trouble to properly wash the barley. So, too, in any puddings like rice or sago this little *contretemps* can always be avoided by taking a little pains.

All these puddings require milk and sugar and eggs if you wish them to be what is called good, though you can make a very plain pudding by simply using water. A very capital substitute for sugar and milk, and at the same time materially assisting in making the pudding richer, is Swiss milk. A couple of table-spoonfuls of Swiss milk is quite equal to a quart of country milk, and more than equal to two quarts of London milk. Eggs can be added from one to four to every quart; but one egg with some Swiss milk will make a really first-class pudding.

The next point to consider is, What is the best flavouring to use? If money is no object, there is nothing like vanilla. Perhaps the cheapest is the *zeste* of lemon. A nice flavour can be obtained by boiling a few bay-leaves in the milk; and if you or any of your neighbours possess a bay-tree this costs nothing. A very nice flavouring can always be obtained by using grated nutmeg. Some, of the nutmeg should be added to the pudding itself, and boiled with the milk, and a little more grated over the top of the pudding when it is finished. Half a nutmeg would be ample for a quart pudding.

These puddings are very nice served cold. If baked in an ordinary pie-dish, they will turn out on to a dish; and a quite plain pudding can be ornamented with little knobs of jam placed round the edge. Jam is now so much cheaper than it used to be that the expense is very trifling; and so far from jam being unwholesome, children, who, Nature teaches us, require sweet food in very early life, always enjoy a pudding thus decorated. For them

we would recommend to use no eggs at all. Good jam can now be bought at 4d. per pound. A very good substitute for jam is orange marmalade, which can now be obtained good at a cheaper rate than all but the cheapest kind of jam.

Cheese-Cakes.—A very favourite sweet with many persons is the old-fashioned dish known as cheese-cakes. Probably the origin of the name was that in old-fashioned country-houses cheese-cakes were made by using the curds obtained in making cheese; and at the present day, in the North of England, curds are sold in the shops for the purpose. Of course curds can be made from good milk, which can be curdled with rennet. A glass of sherry, however, will be found to be superior to rennet, which is a sour substance of nasty origin. If you want to curdle a quart of milk, put it in an enamelled saucepan and place it on the fire to boil. As soon as you see one or two bubbles commence to rise in the middle of the milk similar to those you would watch for so carefully were you making Devonshire cream, throw in the glass of sherry, and the whole quart of milk will curdle. Strain off the curds, and add to them, for the purpose of making the interior of good cheese-cakes, some white sugar, yolk of eggs, and butter.

The flavouring will depend upon circumstances. Almond cheese-cakes are, of course, flavoured with bitter almonds; lemon cheese-cakes with *zeste* of lemon; vanilla cheese-cakes with essence of vanilla. Line some patty-cases with some very thin puff-paste, and lightly bake them in the oven; add the cheese-cake mixture, and bake it in not too fierce an oven till the pastry is done; but never trouble about the colour of the mixture, which ought to be of a dark fawn colour when finished. This colour can be instantly obtained by using a red-hot salamander; and, as you have been before advised, if you haven't got a salamander, a small red-hot shovel is equally good.

That very delicious sweet usually met with abroad, but seldom in this country, known as *Frangipani* cream, is made by adding to a mixture of this kind some powdered ratafia and a glass of rum or brandy.

A much cheaper kind of cheese-cake is made by mixing together, say, a quarter of a pound of butter, 6 oz. of sugar, a couple of lemons, and 4 eggs. You must get as much of the outside of the lemon rubbed on to the sugar as possible, and then you can squeeze the juice of the lemon on to the sugar. You can melt the butter in a tin in the oven, and put the sugar with it; and you must take care that the sugar is thoroughly dissolved. This makes a very rich mixture; and if you are going to make

small cheese-cakes out of puff-paste, it does very well as it is; but if you are going to make a large cheese-cake in a dish, in which a considerable quantity of the mixture would be eaten at once, it will be found a great saving to add to this quantity here given two or three good-sized cold potatoes. Two large cold potatoes, as floury as possible, and as large as the fist, will enable you to make double the quantity at the same cost; and at the same time the cheese-cake, or pudding, whichever you like to call it, is improved, as the original mixture is too rich to be eaten except in very small quantities. If this cheese-cake is made in a dish, you should first line the rim of the dish with puff-paste, and crimp the edge with a fork, like an old-fashioned woman's night-cap. Bake the cheese-cake in the oven, and take care that the top of the cheese-cake does not scorch. You can always guard against this by covering the top with a piece of buttered paper. You can then afterwards obtain the requisite colour—"all over alike"—with a red-hot shovel.

The cheapest form of so-called lemon cheese-cake, and only adapted to be given to children, is to make an ordinary corn-flour pudding, flavour it with *zeste* of lemon and sugar, and colour half of it pink with a few drops of cochineal, and then scrape this jelly-looking sort of substance into little pieces with a couple of forks, and fill some plain pieces of round pastry with it, and place them on a dish alternately. You will fill about a dozen pieces of paste with mixture made in this way for about one penny.

Jelly.—We will not here enter into any description of how to make jelly. Really, the jelly now sold in bottles is so good, if you take the precaution of getting the name of some well-known manufacturer on the bottle, that, as a rule, it will be found a great saving of time and money to obtain the jelly in bottles. The following jellies are now sold in this form:—Calf's-foot jelly, lemon jelly, champagne jelly, madeira jelly, noyau jelly, orange jelly, punch jelly, port-wine jelly, vanilla jelly, &c. The usual forms are orange jelly and lemon jelly, and the difference in flavour is not so marked as some people would imagine. These can be had either flavoured with wine or brandy, or without, and these flavourings give the names of madeira, noyau, punch, vanilla, &c., to the jellies in which they are employed. You can also get plain calf's-foot lemon jelly. Now, very often, it is desirable to have two moulds of jelly, and if the moulds are small, sometimes this can be managed by using one bottle. However, it is always best to have them *different colours*. All you have to do, therefore, is to dissolve the jelly and pour half of it out, and colour it a bright red by adding a little cochineal. If you are not particular about the

brightness of the jelly, orange jelly can be very materially improved in flavour by taking half a dozen or more lumps of white sugar and rubbing them on the outside of an orange. This will tend to impart an orange flavour far more than if you use the juice of oranges themselves. It also gives the jelly an agreeable bitter, which many persons prefer. Lemon jelly, of course, can also be improved in flavour (at the sacrifice of a little of its brightness) by rubbing lumps of sugar on the outside of a lemon.

With regard to these various wine jellies, you must first of all observe the state of the jelly in the bottle. As a rule, these bottles are made to suit both summer and winter; and, therefore, if you send a mould of jelly to table in the middle of winter, when it is very cold, or if, in summer, you have in the house any quantity of ice, so that the mould of jelly can be kept in the ice until the last moment before it is wanted, as it should properly be, you can afford to improve these wine jellies by the addition of a little more wine. Of course, considering the price at which these goods are sold, you cannot expect any considerable quantity of really good wine to be added to the jelly at starting. Still, this can always be done in a private house afterwards, and as, probably, you will not on these occasions grudge a little good wine, the flavour of the jelly will be enormously enhanced thereby. You must take care, however, not to add so much wine that the jelly will not set when it is cold. For this purpose, therefore, it is best to add the wine gradually. Now, by placing a saucer on some chopped ice and a little salt, taking a teaspoonful of the jelly and pouring it in the saucer, you can tell whether the jelly will set or not. If it sets, as it will do in such small quantity immediately, you know it will probably bear the addition of a little more wine. If it sets so that it is not a hard jelly, but a very light one, it is, as a rule, safest not to add any more.

Having poured the jelly into the mould, try, if possible, to keep the mould of jelly in ice until the last moment. Jelly, to be had in perfection, should look a bright and clear mould when placed upon the table, and strike to the mouth, when eaten, like an ice. After the jelly has been in a warm room for about half an hour, or more, if it begins to fall to pieces, it is a sign that it has been made in absolute perfection: when you get jelly that you have to bite, you might just as well have none at all. Some cooks are so vain that they will sacrifice taste to appearance. We all know how extremely annoying it is for a plum-pudding when turned out of a cloth to gradually show signs of premature decay in the

shape of a large gash down the side. Still, a plum-pudding of this description is, as a rule, far more worthy to be *eaten* than one which looks like a cannon-ball, and is almost as hard to eat.

A very nice addition to jelly is to put some ripe fruit inside. All that you have to do is to proceed exactly on the same method as you did in putting the slices of *foie gras* into jelly. Suppose you have some ripe strawberries, some ripe hot-house grapes or cherries, or bunches of red currants. When these fruits are used, the jelly should of course be very light in colour. The only way to proceed is to allow the jelly to get cold one layer at the time. Then place a row of fruit, and add the jelly in a liquid state (taking care it is not too hot) by spoonfuls. If you pour liquid jelly into a mould that has a layer of jelly in it already set, you run the risk of disturbing the layer underneath where you pour; consequently it is always best to put the jelly in gently. An ordinary ladle used for gravy or bread sauce is best adapted for the purpose, as by this means you need not pour the jelly until you are almost touching the layer beneath it.

When the jelly has been placed in rough ice and salt for an hour or more, it is generally very fairly hard, and therefore you can afford to take liberties, so to speak, in turning it out. For this purpose, if the mould is a metal one, there is nothing like dipping it for about two seconds in lukewarm water. Then roughly dry the mould outside with a cloth as quickly as possible. Place the glass or silver dish, on to which the jelly is to be turned, over the top of the mould, then turn both upside-down together. The reason that we warn you about wiping the outside of the mould is, that if you don't do this, some water will run down the outside of the mould and make a white streak round the bottom of the mould. In the case of a glass dish this would not so much matter, but in the case of the jelly being turned out on to a silver dish lined with a piece of ornamental white paper, the appearance is a little bit spoiled by making the paper wet.

As a rule, when the mould has been dipped into lukewarm water the jelly will turn out simply by carefully lifting the mould. Here again do not be in a hurry. If you lift the mould up quickly, a vacuum is often caused in the top of the mould between it and the jelly. Properly speaking, moulds should have a sort of air-hole at the top; and before you turn out the jelly, it is always advisable to

open this air-hole with a pin. Some moulds, however, do not possess this requisite, and then considerable care should be taken in turning it out, as, if you use any violence at all, you will pull the mould of jelly in half, and the top part of the mould will stick, because there is no room for the air to get in. The mould not turning out so easily as you anticipated, try with the fingers first of all to pull the jelly away from the edge of the mould. Jelly is very elastic, and you will find you can easily separate it all round the edge simply by pulling with the fingers, the latter sticking very slightly to the jelly. Then take the dish and mould, and keep them tight together, and apparently dash the dish and mould towards the floor, as if you were in a temper, altering your mind just as the jelly gets half-way down, when you stop your arms with a sudden jerk.

Of course impetus has been given to the jelly as well as to the mould and dish. When you do this therefore, very often you will hear the jelly give all at once. All you have now to do is to remove the mould from the top.

In the case of china moulds it is not so easy; and it is no use whatever to try to loosen the jelly or any other kind of sweet inside the mould, by dipping it into boiling water.

Poreelain and china convey heat so very slowly that you would run the risk either of not touching the jelly at all, or else of half melting it. The only way in using a china mould is to wet the mould before you put the jelly in; or in some cases you can use pure olive oil, though this should be avoided in the case of sweets as a rule.

If you have bottled jelly, either quarts or pints, in the house, ready in the store-closet, it makes a very convenient dish in a hurry, as on those occasions mentioned, on the unexpected arrival of one or two friends just about the commencement of dinner. The only way to treat jelly in this form is to take a bent skewer, or something of that kind, rake the jelly out of the bottle in little pieces, and fill up some jelly-glasses and put them on a dish. You will not have time to melt the jelly and let it re-set in a mould at so short a notice, even if you had ice. You ought to allow at least an hour for the jelly to set.

Meringues.—One of the most popular sweets, and one in which it is always advisable at a dinner-party to allow one each, and a few over, is a

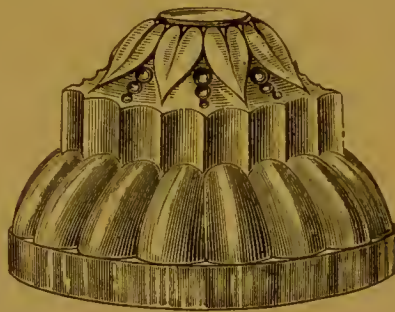


Fig. 1.—METAL JELLY-MOULD.

dish of meringues. These are by no means expensive, but they require great care in their preparation, and also in the baking. The outside of the meringue is composed solely of white of egg and powdered sugar. Now, if you are going to prepare a supper or dinner for a number of guests, the yolks of the eggs can be used for other purposes—and you should remember that in making custards the custard is improved materially by using the yolks of eggs alone, without the whites—though of course you must use more, to make up for the loss of the albumen in the white, if you require the eggs for the purpose of causing anything to set. Again, the yolks of eggs can be utilised for making egg-balls for the purpose of adding to mock-turtle soup and dishes like *tête de veau en tortue*.

In making meringues, proceed as follows:—First take one pound of the very best finely sifted white sugar, next take twelve whites of eggs, and work these whites to a stiff froth. Machines are sold for this purpose, consisting of a whisk, which is moved very rapidly by turning a handle. Practically nothing is so good as an ordinary whisk in an experienced hand. Whipping white of eggs or cream is undoubtedly an art, and, like most other arts, is only acquired by practice and experience. This is a somewhat long job, but when whisked, the foam must be stiff. Now gradually add to this basis of stiff white froth the finely sifted sugar, and add the sugar gradually, and avoid knocking the froth about too much, as thereby you will render it soft, and then it is difficult to manipulate it. Then take a broad strip of paper used for baking, and, with a large spoon, mould out lumps of this froth in the shape of a large egg, and place them on the baking-sheet side by side, about a couple of inches apart; and when you have got as many as can be made out of the quantity, shake a little rather coarsely sifted sugar over the outsides of these imitation eggs; and for this purpose you can reserve the dregs, so to speak, of the sugar previously sifted. Place the whole in a moderate oven, and bake them till the outsides have turned a light fawn colour, or till the outside is well set, but still quite white; then take them out, open them sideways with a spoon, and scoop out the white soft interior, remembering that they require very delicate handling, and let these cases dry. Now these can be filled with either whipped cream, or sometimes with ices. When filled with whipped cream, the

latter must be sweetened and flavoured with either vanilla or orange-flower water, or a glass of some kind of liqueur. Of course when you take the meringues out of the oven, you have to open them; but do not open them as if you were breaking an egg; open them longways. It is best to dry them, after the inside has been scraped out, in the oven; but the oven must be very slack indeed, as they ought not to acquire any more colour after being taken out, and especially they should not get coloured on the inside. Of course, when you have filled them with either whipped cream or ice, you put the two halves neatly and carefully together; and the inside ice or cream enables the halves to stick together without risk of falling asunder. The most popular kind of cream to put inside meringues is that flavoured with either maraschino or vanilla; the

best kind of ice—or, at any rate, the ice generally found the most popular—is coffee ice.

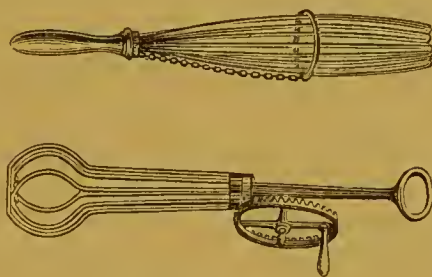


Fig. 2.—EGG-WHISKS.

Whipped Cream.—This is a very useful article in all kinds of high-class sweets; but it is not everyone who knows how to make it in perfection. In the first place, it must be pure. One of the best recipes ever yet given for

making whipped cream will be found in that admirable little work called “A Year’s Cookery,” and runs as follows:—“The cream will be firmer if made the day before it is wanted. Put half a pint of double-cream—that is, cream that has stood twenty-four hours—into a cold basin; sweeten and flavour it, and whisk it in a cold place with an ordinary whisk till it froths on the top. Skim off this froth, and lay it at once on a fine sieve, and whisk again until the cream is finished. Take away the liquid that drains from the froth, and reserve it for the celery sauce. When the froth has thus stood for some hours, it will be ready for piling on the centre of a dish, or for any purpose of a similar kind. If the cream becomes very thick whilst it is being whisked, put a teaspoonful of water with it. The same remedy should be adopted if the cream should ‘turn,’ or become slightly cracked; this mischance frequently occurs, especially in hot weather. The quantity of whipped cream may be increased by beating the white of an egg to froth, and adding it to the cream before beginning to whisk it.”

Whipped cream can be used in various ways. It can be flavoured, as we have before said, with liqueurs, or vanilla, or orange-flower water, &c.; or

it can be mixed with fresh fruit, as strawberries and raspberries, when it will form strawberry or raspberry cream. Of course, when this is done the cream must be sweetened with some very finely sifted powdered sugar. While on the subject of whipped cream, we may here call attention to a dish that is always popular—namely, Scotch woodcock; and the best Scotch woodcock that can be served is made by placing some whipped cream on the top of some anchovy toast. However, we must keep to our subject, which is sweets.

There is, perhaps, nothing so useful as a little whipped cream to finish off a well-laid suppertable. For instance, a heap of whipped cream, not much more even than a brimming teaspoonful, can be placed in the centre of each of a dish of little jam tarts. The little white heap is set off by the ring of jam by which it is surrounded; but here, again, we have a still higher ornament in the shape of a few brightly coloured sugar-plums, which can be sprinkled over the cream itself. These sugar-plums must be bought; they cannot, as a rule, be made in a private house; and they must be of the best quality, and very small. The sugar-plums referred to are what are popularly known as “hundreds and thousands.” These tiny bright specks of red, green, orange, blue, &c., rest on the top of the cream without sinking into it; and the effect is very good indeed.

Again, a heap of whipped cream can be finished off by having sprinkled on the top a little coarsely sifted sugar, which should be coloured a bright red by being shaken in a saucer with a few drops of cochineal. In addition to this, you can sprinkle a few green specks made from chopping up very small some green angelica or crystallised figs. Remember, however, that the whipped cream must be dropped from a spoon, as you cannot touch it; and the hundreds and thousands must be sprinkled very gently and very lightly, as otherwise they will bury themselves in the cream.

Trifle.—One of the most popular dishes in the way of sweets is, undoubtedly, a trifle. A really first-class trifle is a very expensive dish, inasmuch as the base corresponds very nearly with our high-class cabinet pudding. The bottom of a good trifle should properly be composed of macaroons and ratafias soaked in various kinds of liqueurs; this, however, is rarely done, except on very great occasions indeed. But you require macaroons and ratafias, which are now much cheaper than they used to be, though not so good. These can be soaked in brandy, and slices of stale sponge-cake mixed with them, so as to form a smooth surface at the bottom of the trifle-dish. You next spread a

layer of jam. Raspberry jam is the best for the purpose, but apricot jam is a very good substitute, and has with some people the enormous advantage of containing no pips; and it is always advisable to avoid the risk of allowing even one of your guests to have his evening's amusement spoilt by finishing up with a tooth-ache. On the top of the jam you pour a layer of solid custard, made with yolks of eggs, and flavoured with brandy. Now pile up a high snow-like mountain of whipped cream on the top of the whole, and at the last moment ornament this snow-capped mountain with a few hundreds and thousands, as we have suggested before. We say “at the last moment” advisedly, as you will find by experience that in time these little sugar-plums have a tendency to break into the snowy froth; and if any of the trifle is left till the following day—which, by-the-by, is a very rare occurrence, and especially if made properly with brandy—the whipped cream resembles somewhat a heap of snow that has partially thawed.

At children's parties many persons object to the use of brandy. When this is the case, sweetened sherry or even sweetened cowslip wine will do very well instead.

Tipsy-Cake.—These words “cowslip wine” remind us of another very popular sweet—namely, tipsy-cake. This, we all know, is made by placing slices of sponge-cake, with a layer of jam between each, on a dish, and then soaking the cake in wine—golden sherry (not Amontillado) being best for the purpose. For children's parties sweetened cowslip wine is a capital substitute, and has the advantage of being cheaper and far better adapted, from its being non-alcoholic, to suit the taste and health of children of tender years. When the cake has completely soaked up the wine—and this is a work of time, as you have to ladle up the wine that runs into the dish over and over again—the whole should be covered with a very thick custard; and the dish is then ornamented by being stuck all over with strips of white almonds cut as thin as possible. These almonds, if not properly prepared, have a tendency to turn brown, and this destroys the appearance of the dish. To avoid letting them turn brown, you must proceed as follows:—First of all you must get the skins off the almonds, and this is only done by throwing them into hot water. After they have been so treated, the skins are very easily rubbed off with the fingers; and if you placed these now snow-white almonds on a dish, they would turn brown in a very short space of time (this is owing to the action of the heat); have, therefore, ready by you another small basin of cold water, and the moment you have rubbed off the skin throw the

almonds into the *cold* water, and let them soak there some time. You can now cut these almonds into thin strips with a sharp knife, and they will maintain their snow-white colour. The principle, indeed, is very similar to the every-day process of peeling potatoes, which, as every cook knows, have a tendency to turn brown at the edges after being peeled unless they are thrown into cold water immediately. You can vary the ornament of a tipsy-cake by adding little strips of green angelica cut into a similar shape to the almonds; but perhaps the dish looks best if it is left a pure white.

There is one more class of sweets in which the same idea is used to ornament a variety of dishes, which can be served either hot or cold, in which the ornament consists in using the yolks and whites of eggs separately. We will take a simple case first. Suppose you have by you the remains of any kind of cake—plum-cake, or, better still, sponge-cake. Place these in an ordinary pie-dish, and pour over them a good custard, flavoured in any way you like; only make the custard entirely with the yolks of eggs, and reserve the whites separate. Of course, if you soak the cake in a little wine it is a very great improvement. Put this in the oven to bake, and, as soon as it is set, take it out of the oven and cover the top of the pudding with a good layer of any kind of jam. Replace the dish in the oven for the jam to get hot—or, at any rate, warm. In the meantime whip the whites of eggs to a stiff froth, and again take the dish out of the oven and pile up the whole of the white of the egg on the top in a sort of mountain, covering the edge of the pie-dish as well as the pudding in the middle. Put the pudding once more in the oven, until the whipped white of egg is set from the action of the heat, but do not allow it to get brown, as it soon will do if left in too long. Now send it to table; and, if you like, sprinkle a little sugar over the top, only very sparingly. This dish costs no more than an ordinary custard pudding; but by taking this little extra trouble with the eggs, what an enormous difference is made in the appearance of the dish!

Omelettes.—We will conclude our remarks on sweets generally by describing how to make that popular one known as an omelette. How rarely do we meet with a really good omelette in private houses, either sweet or savoury! We believe the sole cause is that cooks refuse to grasp the fact that a frying-pan or omelette-pan for making omelettes should *never be used for any other purpose whatever*; and we have referred to this in our previous article on “The Uses of a Frying-Pan.” Take a perfectly clean well-tinned omelette- or frying-pan, and having beaten up thoroughly three eggs

with a dessert-spoonful of very finely powdered sugar, dissolve two ounces of butter in the frying-pan; and, the instant the butter begins to froth, pour in the beaten-up egg and sugar, which should be stirred at the last moment to prevent the sugar settling at the bottom. Now with a silver spoon stir the beaten-up egg and butter all together, and keep scraping the bottom of the frying-pan very quickly to prevent it sticking and burning. The moment the whole mass begins to set, scrape it all together into a half-moon shape; or we may describe it better by saying, scrape the whole mass together so that it covers only rather less than half the frying-pan and assumes the shape of an apple turnover; do not let it set all over the pan like a pancake, unless jam has to be put inside. At the same time you must slacken the heat by lifting the frying-pan a little away from the top of the fire, or, if you are making the omelette over a shut-up stove, by moving the frying-pan to a rather cooler place. When it is nearly set, take the frying-



Fig. 3.—OMELETTE-PAN.

pan off the fire, and slant it in front of the fire, of course taking care that the omelette does not slip out of the pan altogether. This causes the omelette to rise, and in about a minute it will be finished. Shake a little powdered sugar over the top, and serve immediately; for, remember, you cannot warm an omelette up. The eggs can be flavoured at starting with a little vanilla or orange-flower and water. If the omelette has to be served with jam, you should let it set in the frying-pan like a pancake, then place a table-spoonful of jam over one half, and with a slice turn the other half over it, taking care that enough of the beaten-up egg remains unset in order to stick the two circular edges together.

Savoury Omelette.—A savoury omelette, though not, strictly speaking, a sweet, often takes the place of one. There are many persons who do not care for sweets, and who prefer to finish dinner with a “savoury” instead. Probably the majority of middle-aged persons would prefer a “savoury” custard to one made with milk and sugar in the shape of a custard pudding—a savoury custard being simply eggs and good stock beaten together and baked in the oven in a pie-dish till it sets.

The great mistake made by English cooks in

making a savoury omelette, is that very few women are aware of the fact that a savoury omelette requires the addition of savoury herbs similar to those used in mock-turtle soup and veal stuffing. To make a small omelette, enough for one person, you will require three eggs. These must be broken into a basin and thoroughly beaten. Now chop up finely and add a piece of onion about as big as the thumb to the top of the nail; enough, when chopped, of parsley to nearly fill a teaspoon, a saltspoonful of salt, half a saltspoonful of pepper, and about a saltspoonful of very fine sweet herbs. As a rule, these cannot be obtained fresh from the garden, like parsley; but most housekeepers have a bottle in the cupboard labelled "Mixed Sweet Herbs." It is what they use for making ordinary veal stuffing. Turn some of the contents of the bottle out into a sieve, and shake the sieve over a large sheet of paper, till you get sufficient herb-dust to fill a saltspoon. This herb-dust is better for mixing with beaten egg than the dried herbs themselves, while the latter would be better for making or flavouring soup. Now beat all this together till the eggs froth. Next place two ounces of butter in a brightly tinned frying-pan; put it on the fire till the butter begins to froth; then, beating the eggs up to the last moment, pour them into the frying-pan, and, with the table-spoon in the right hand, quickly scrape the bottom of the frying-pan in every direction, to prevent the mixture sticking and burning. As soon as it begins to set, scrape it all together into rather less than half the pan. During the first part of the scraping, remember, the mixture will be half lumps and half fluid. This often frightens novices. It will soon settle into a compact mass; but directly you cease to scrape the bottom of the frying-pan you must slacken the heat, or it will burn. Remove the frying-pan from the top of the fire, and finish the savoury omelette off by holding it in a slanting position in front of the fire. This will cause the omelette to rise and make it lighter; or you can finish it off still better with a red-hot shovel. The effect of this is that, when held over the top, it causes the omelette to rise in blisters, and there is no harm in very slightly browning the top. The omelette is very nice served quite plain as it is, but many persons prefer it with some good brown gravy.

Savoury omelette is often served with some kind of accompaniment, such as kidneys, oysters, ham, &c. When this is the case, you must proceed exactly in the same way as you did in making the sweet omelette with jam—*i.e.*, you must let the omelette set, or very nearly set, in the frying-pan, round, like a pancake. The meat, or forcemeat, to be added should be then placed on one half, and the other half

doubled over. In the case of omelettes and kidneys, it is a better plan to make the omelette solid, and place it in the centre of the stewed kidneys; but in the case of some small quantity being added, such as oysters, it is best to wrap the omelette over it. Omelette and oysters are very nice, but the dish is somewhat rich. The interior, or oyster forcemeat, should be just the same as you would make to place in an oyster patty.

Pancakes.—Another dish to which we referred in our remarks on the uses of a frying-pan, is the pancake. As in omelettes, the first point for consideration is the condition of the frying-pan, which must be scrupulously clean. It is best to put a little fat in the frying-pan first, make it hot, and then wipe it out.

There are a variety of pancakes, but space will not permit us to give recipes. The following are enumerated and described in "Cassell's Dictionary of Cookery":—

American	pancakes	Oxford	pancakes
Apple	"	Pancake	à la crème
Apple with	custard pancakes	Pancake	balls
Cream	pancakes	Polish	"
Currant	"	Rice	"
French	"	Rose-coloured	"
Ginger	"	Scotch	"
Indian	"	Snow	"
Irish	"	Stuffed	"
Leipzig	"	Windsor	"
New England	"		

Pancakes are made by pouring batter into a frying-pan containing a little fat, and frying it brown, first on one side and then on the other. The thickness of a pancake should be little more than an eighth of an inch. The fire should be clear and fierce. The edges of the pancake or thin round of set batter (for the batter will set almost immediately it is put in the frying-pan) should be kept away from the sides with a knife or spoon.

To turn a pancake properly, requires some skill. You take the frying-pan off the fire, and throw the pancake into the air and catch it on the other side. A novice too often makes a mess of it; and we would particularly recommend young mistresses not to attempt to show their cook how to do it unless they feel pretty sure of the result. Fancy your feelings if when, in an irritable or impatient moment, you wished to "teach cook," the result was that you simply "chucked" the pancake up the chimney! So we would advise you, unless already an adept in the art, first to get a cooked tough pancake, and practise in secret with an empty cold frying-pan before attempting to give lessons.

A pancake can be cut in half, or turned with a slice, but the real *artiste* should throw the pancake. It wants a little quick jerk; but to describe the jerk

in print or words is almost as difficult as to describe how to screw back a ball at billiards.

Next the batter. The quality of the pancake depends upon the batter. Very high-class pancakes indeed are made as follows:—Mix 2 oz. of powdered sugar with 2 oz. of flour, 1 oz. of powdered ratafias, a teaspoonful of orange-flower water, two yolks of eggs and one whole egg, and half a pint of cream, adding a pinch of salt. This, of course, is an expensive mixture, and would only be used on very great occasions.

Ordinary batter for pancakes is made by mixing

milk, eggs, and flour. As a rule, two table-spoonfuls of flour and a quarter of a pint of milk to every egg is sufficient. The batter must be perfectly smooth and free from lumps, and should be of the consistency of thick custard.

Pancakes can be served flat or rolled, and coarse powdered sugar can be sprinkled over them, and a red-hot salamander or shovel held over it to glaze them. Sometimes pancakes are served with a spoonful of jam under each, folded over, but there is probably nothing better than the popular brown sugar with a lemon squeezed over it.

DOING UP A HOUSE.

PAPER, paint, and whitewash will not preserve their pristine freshness, nor even their protective qualities, for ever; and as both wood and ironwork perish if not kept well covered with paint, a lease always, or almost always, contains stipulations as to the exact intervals at which inside and outside painting shall be done. In many parts of England the landlord does all outside painting and repairs, and the tenant inside ones, but in others the tenant does both. In the very usual case of three years' agreements, however, the question of whether a tenant stays on beyond the first three years often depends upon what the landlord is willing to do inside; and as he would most likely have to do up the house for a new tenant, he often agrees to do it for the old one, or perhaps after another year or two. Of course all this is really reckoned in the rent compared with the fair marketable letting-value. Where such repairs and renovations are done by the landlord, however, it often happens that he lives at a distance, and will prefer the operations to be ordered, contracted for, and superintended by the tenant. It will depend upon the circumstances and the character of the landlord whether it is wise for a tenant to accept such a responsibility; also upon the engagements and time at disposal of the tenant himself.

A very usual arrangement is for the outside painting to be done every three years, or twice within the seven years, which constitute the usual divisions of the lease; and unless this is done, and all the cracks are filled up with putty and covered by three coats of good oil paint, and in some cases varnish, the wood shrinks, rots, and becomes brittle. Ironwork rusts and corrodes if not properly painted, and the process renewed at not very distant periods.

Every part that has ever been painted must undergo the same process at each of the times fixed for it

to be done. For instance, if any part of the outside of a house is stuccoed and painted, it has to be perpetually renewed and cleaned into the bargain; and in south-westerly aspects, where the bricks have been painted with several coats of boiled linseed oil to prevent the driving rain from the exposed quarter penetrating them, it has to be done over again just the same as the rest of the paint.

Barns, sheds, gates, and fences, that are not painted, are usually tarred, and it is extremely necessary that this should be done in hot dry weather, as early as possible in the summer, so that it may have time to dry and harden before the atmosphere gets charged with damp. If neglected till autumn, it remains sticky, and sometimes does not dry for more than a year. If the hands become soiled with this tar, nothing will remove it but the application of oil or fresh butter, followed by much soap and water.

Doing Up by Contract.—It is very usual to paint a house and its outbuildings by contract, and in that case the workpeople are apt to leave every ledge above the level of the eye unpainted, and to neglect the stopping and puttying. They also may mix their paint so thin that "a very little of it goes a long way," and the wood does not receive the amount of protection intended by the person who gives the order. Another thing to which these gentry are prone, is to neglect moving the window-sashes, so that they stick, and in some cases so effectually that they are completely fixed.

It is to a contractor's interest, in a general way, to get over his work as quickly as possible, and that is one reason why many people prefer that mode of having things done; but, on the other hand, if no stipulation is made as to time, and the contractor

knows that he has the job before him to do at his leisure, as is sometimes the case with an empty house, he simply sends his men there when they have no more pressing business in hand.

When work is done by contract, there is a fixed sum of money to be paid for certain definite work which is specified; and care should be taken *not to depart from the terms of that contract* by giving extra orders, or changing plans, as it opens the door for a considerable augmentation of price. When the job is large, the contractor sometimes binds himself to finish by a certain date, and to pay a fine for every day afterwards until he has completed the whole; and this is always a wise stipulation in cases where punctuality is of real importance.

When workpeople are called in without any stipulation as to time or price, the work is often more efficiently done; but as the ultimate account is reckoned by so many pounds of paint used, and so many hours' labour, the men do not think it incumbent on them to hurry, nor even to be commonly industrious. They come late, leave off early, take long dinner-hours, make excuses to "get their beaver," or "go and have a drink," and generally dawdle, gossip, and watch one another's operations in a manner that is very exasperating to the paymaster. Of course there are exceptions, but the general order of things is as we have described; and, as a rule, a contract with a respectable man is much the best system for all parties.

Journeyman Work.—Of course the best way of getting over the miseries of having a house thoroughly done up, is to take the family right away before it is begun, and not to bring them back till it is all over. But this is easier said than done; and unless there are some very responsible and superior servants left at home to keep an eye on the workpeople and report progress, the work is likely to be most unsatisfactory. Where it is not convenient to go away—and it is, moreover, desirable not to spend more money than can be helped—it is a very good plan, and one that can be acted on with very little inconvenience, to do a room at a time in winter and early spring, by the aid of a journeyman painter who is out of regular work, as many such men always are in winter; and there can be no greater kindness to them and their families than to find them employment. Such a man, if a good painter, will be very likely to know how to whitewash, and to be acquainted with a paper-hanger who is equally glad of work in the dull season, and hangs paper at a fixed price, varying from 6d. to 1s. per piece, according to the kind and quality of the paper, and the care requisite in hanging it.

Such a journeyman painter as we have suggested

will generally mention a set price for a room, finding his own paint and whitewash, and everything except the paper and the cost of hanging it. If he includes the latter items, employing his own paper-hanger, of course he gets a little profit on the paper; but as this generally has to be sent for from a distance, or even to be made, it is much better for the employer to choose his own paper from some large stock and pay for it, taking care to have too much rather than too little, and bearing in mind that last year's patterns as a rule are much cheaper than the very newest, and quite as nice.

Amateur Work.—Some households possess that invaluable functionary a "handy man," who takes a pride in doing a little of everything, and doing it to the best of his ability. He may be gardener, groom, or general factotum; but, whichever he is, there are sure to be wet foggy days during the autumn and winter when he can do comparatively little in his own special department, but can save his master endless trouble and expense by doing a little amateur painting and whitewashing. The different kinds of paint now sold ready for use are of great value to those who can command the services of such a man.

It must always be reckoned that paint to the value of £5 requires just about an equal outlay for brushes, oil, and turpentine before it can be applied. To this £10 about another would have to be added for skilled labour, so it will at once be seen how much saving can be effected where the services of a handy man in the house are available. More will be said on this subject in detail in another article.

Painting.—The price of common paint varies with the colour and ingredients. Eightpence per pound is very usual for plain colours, and a little more for green of the kind with which verandahs, railings, &c., are generally painted. The modern style of painting in plain colours of two or more shades is very much less expensive than the old fashion of having windows, doors, and wainscots painted, grained, and varnished. It is also much better, because graining was only a hideously unnatural and perfunctory imitation of different kinds of wood.

The first process before re-painting wood is to rub it down with sand-paper and pumice-stone; and where the old paint is blistered, it has to be burnt off—a long and rather mal-odorous process. A capital preparation for this purpose, and very easy of application, is Carson's Detergent—a liquid which, by harmless chemical action, renders paint quite easy of removal, without the slightest injury to the material forming the ground. For use in vertical positions, where the liquid might run off, the preparation can

be had in paste. It has been most successfully used in removing paint of many years' standing from old oak doors and seats in parish churches, and is said in one case to have removed something like fourteen coats of paint a century old. The paint comes off in much less than a quarter of the time that would be employed in scraping it without such aid, and with little wear to the woodwork.

Where rooms have to be whitewashed, that ought to be the first thing done: then the painting, and then the papering. But unless desirable for the sake of absolute cleanliness, when lime-washing is more effective, whitewash is very much giving way to papering. A ceiling can be stopped and papered very quickly, and with very little "mess;" and when the paper gets dirty in any part, it can be replaced without papering the whole. There is nothing in the whole process of doing up a house that causes so much annoyance as whitewash, for it spatters the floor and everything left uncovered, and it is not always possible to quite cover everything, and a great deal of scrubbing is required to remove it. Another great annoyance is that careless workpeople drop blotches of paint about on the floors, and this is very difficult to remove, and quite impossible to stain over if it is wished to stain a border round the rooms.

A useful precaution that should always be taken is to carefully cover over all mantel-pieces before a room is re-painted, or done up in any way. Workmen constantly place their pots of paint and other materials on them, as well as jugs of beer and cans of tea; and whether the mantel-piece be of wood or marble, the result is equally disastrous. Stains thus caused cannot always be got out again, even by the best recipes, depending chiefly on the amount of stain, and its exact character and that of the wood or marble. The best methods of dealing with stains on marble have been already given at page 250 of the present volume.

A capital material for coating the walls or ceilings of rooms is of French origin. A wash is first made of *oxide* of zinc and size, and laid on with a brush, and over it is put a second coat of size and *chloride* of zinc. The oxide and chloride at once combine and form a surface as smooth as that of oil paint, but without the smell.

The introduction of this oxide or white of zinc instead of white of lead in house-painting, dates very much farther back than is commonly supposed. A certain M. Leclaire, who rose from absolute poverty to a good position by sheer hard work, and was the founder of one of the very first co-operative firms ever known, was much distressed on finding that 30 per cent. of the sickness among house-painters was due to the use of white-lead. He therefore set him-

self diligently to discover a remedy, and associating himself with M. Ernest Barruel, an eminent chemist, worked out a practical mode of utilising white of zinc. M. Leclaire at once rented some zinc-mines, and in 1846 established a manufactory in one of the lower parts of Paris, which produced eight hundred pounds of zinc in twenty-four hours. Workmen very much dislike new methods, so the trade was speedily split up into two camps—the sticklers for white-lead, who were a sickly crew, and the converts to white of zinc, who enjoyed as good health as men employed in any other trade. Like all other innovations, it has worked its way very slowly into use, and it is calculated that even in Paris at the present time only 75 per cent. of the house-painting that is done is with white of zinc instead of white of lead.

There are a great many ways of getting rid of the smell of fresh paint from a room. One is to slice onions into a dish and leave it in the room all night, but some folks prefer the smell of the paint to that of the onions. Another is to stand a pail or pan of water in the room, and this has at least the merit of being innocent. Another old-fashioned authority suggests the addition of a handful of hay to the pail of water; and still another plan is to place a pan of lighted charcoal in the room, throw on it two or three handfuls of juniper berries, and close the doors, windows, and chimney as completely as possible for twenty-four hours.

Paperhanging.—This is not a very long operation, unless the paper be one of so intricate a pattern that a long time has to be spent in matching and joining; and papers are frequently hung over that which is already on the walls. This does very well when a mere change of paper is required; but considering that papers, especially in towns, harbour dust and dirt, and too often insects, the walls ought to be stripped; and this takes time, especially where there are already five or six papers on the walls, that have been hung over one another from time to time. Such a room can never be healthy, and under any circumstances more than one former paper should never be allowed to be covered over by a new one.

Stopping and Plastering.—Pointing is a very necessary operation in doing up a house, and consists in filling up the cracks between the bricks or blocks of stone of which it is built with mortar. This keeps out damp, and also wind, and makes the house look very fresh and neat. Both for this, and for minor repairs indoors (where a smooth cement may be needed), the following may be recommended; it is smooth, resists water, and is sometimes (though incorrectly) called "Roman" cement:—Take 84 lbs. of drift sand, 12 lbs. of unslaked lime, and 4 lbs. of

the poorest cheese, grated through an iron grater. When well mixed, add enough hot (but not boiling) water to make into a proper consistence for plastering such a quantity of the above as is wanted. It requires very good and quick working. One hod of this mortar will go a long way, as it is laid on in a thin smooth coat. Tradition says that a Suffolk cheese is the best for the purpose, but there are plenty of poor Leicester and Derby and Dorset skim-milk cheeses that are as hard as can possibly be wanted.

Whitewash.—This is a very simple thing. For outbuildings it is generally made by mixing white quicklime up in a bucket with hot water and some size. If some sulphate of iron or carbolic acid is mixed in this wash, its disinfectant properties are increased. It may be coloured with yellow ochre or almost any colouring material. Finer whitewash for indoors is made by stirring up whiting in the water instead of lime. The most beautiful whitewash is made by mixing the whiting or lime and size with skim milk instead of water. This is very practicable where cows are kept.

A somewhat newer fashion of making a good whitewash comes from America. Take half a bushel of unslaked lime, slake it with boiling water, and cover to keep the steam in. Strain the liquid through a fine sieve, and add to it a peck of salt previously melted in warm water, 3 lbs. of ground rice boiled to a thin paste, $\frac{1}{2}$ lb. of Spanish whiting,

and 1 lb. of clean glue melted by much and long soaking. Mix all well together, and put it over the fire, or on one side of the hot-plate of a stove, in a pitcher or can, stood inside a large saucepan or boiler, for an hour or two. To this mixture add five gallons of hot water, stir it well, and let it stand for four or five days, protected from the dust. It should be used hot; and if there is a small portable stove or boiler on which it can be kept hot, so much the better. This whitewash retains its brilliancy for many years, and is equally suitable for in or out of doors. One pint will cover a square yard of surface. Colouring-matter may be stirred into this wash; but most greens cause it to crack and peel.

It is sometimes said that white and colour washes are undesirable for kitchens and sculleries, on the ground that they cover up one set of impurities and furnish soil for the growth of another. This is a mistake; and if a little carbolic acid be added to any simple whitewash, the process will be at the same time a very effectual means of germicide and disinfection, should there be any supposed need of either process. Plastered walls and ceilings will, however, take oil-paint extremely well, and, if painted with three coats, they can be washed with hot soap-suds several times a year, or whenever there seems to be an accumulation of dirt and steam.

Painting, plastering, and whitewashing will be more fully treated of in detail in a future article.

HOUSEHOLD LINEN.

From the earliest times it has been usual for good housekeepers to take pride in the contents of the family linen-press. One or two generations ago it was even thought desirable that they should spin the flax for their linen, and hand-made linen was passed on from one generation to another as a heirloom. A good supply of household linen formed a most important part of a bride's *trousseau*, and the quality and abundance of the linen was then as much a sign of the wealth and position of a bride's father, and of the *savoir-faire* of the bride's mother, as the display of diamonds and dainty dresses is now. In one of Mrs. Gaskell's novels mention is made of a well-to-do housekeeper whose son fell in love with a girl whom the mother did not consider worthy of the glory which awaited her. This mother had a hard fight with herself before she could accept the inevitable; but the first sign she made that she had yielded was that she went to her

linen-press, took out the sheets and table-cloths (which had been the pride of her heart for years), and began to pick out the initial letters which were marked in the corners, preparatory to putting in other letters to show that the linen had changed owners. Apparently the thought in her mind was that the next greatest sacrifice to giving up her son was giving up her linen. To people who comprehend the feeling which housekeepers of repute of a hundred years ago had for their linen, this incident will not seem at all exaggerated. Two or three generations back a well-kept and well-stocked linen-press was ranked with old silver and old furniture as a sign of the refinement and respectability of the owner; and a housekeeper who could be content to have linen of all kinds, to use it promiscuously, and to keep it in an ordinary drawer or cupboard, was outside the pale, and had no perception of the sacredness which belonged to household mysteries.

It is not known when linen was first made, though the industry can be traced through centuries. It is first heard of in Egyptian history. From the earliest times the ancient Egyptians were famous for the growth of flax, as well as for the garments they wove from it, and the belief prevailed amongst them that their goddess Isis had taught them how to weave. They used linen always to wrap their dead in, and many mummies have been brought to this country from Egypt enveloped in linen of marvellous fineness. A well-known German writer tells that he found several linen napkins within the folds of the covering on a mummy which he unwrapped. He had them carefully washed several times, and then used with great veneration the linen which had been used 2,700 years before.

The early Britons were apparently not skilled in the arts of spinning and weaving. In a handbook on "Textile Fabrics" published for the Committee of Council on Education, we read that "it is very doubtful whether for many ages our Early British forefathers were aware of the use of flax for clothing purposes; they would otherwise have left behind them some shred of linen in one or other of their many graves. Following as they did the usage of being buried in the best of the garments they were accustomed to wear, or most loved when alive, their bodies would have been found dressed in some small article of linen texture, had they ever worn it." In the fourteenth and fifteenth centuries, however, women used to spin and weave, and old and young, rich and poor, used to fill up their leisure hours indoors with working at the loom. In a manuscript of the fourteenth century, now in the British Museum, there are illustrations given of ladies carding and spinning, and these are very curious.

In the fourteenth century Eylsham or Ailesham, in Lincolnshire, was famous for its linen napery. Since that time a loom of the simplest make was to be found in almost every English nunnery and homestead. The introduction of machinery, however, caused domestic spinning and weaving to disappear almost entirely. It is true that an attempt has been made of late years to revive it in one of the valleys of Westmoreland, but the success attending the effort has been very partial, and the linen thus produced has been found too costly for average housekeepers, and has proved more suitable for embroidery and art purposes than for use. Of course the employment of machinery has immensely extended the manufacture of linen, and the term "household linen," instead of being limited, as it formerly was, to sheets, pillow-cases, table-cloths, and dinner-napkins, is now understood to include

the large number of articles needed for domestic use, whether these are made of linen or of cotton.

Cotton, as every housekeeper knows, is much cheaper than linen; and this was the chief reason why it first came to be used as a substitute for linen, both for under-garments and for household use. After a time, however, sanitary experts discovered that cotton was the more healthful of the two fabrics, because it was warmer, and carried off the heat of the body less rapidly. Linen, everyone agreed, was more luxurious, but it was much more likely to give colds and rheumatism. The consequence of this discovery was that people who considered health and comfort began to be afraid of linen. Those who would, a few years ago, have been ashamed to put their guests into beds fitted with sheets that were not of the finest, softest, and whitest linen, began to use twilled cotton sheets with the greatest readiness, and felt that they were proving their common sense by doing so. For table use linen has always held the field, but for bedroom use it has of late years been largely superseded by cotton.

Bed-Linen.—Now there are signs, that even in bed-linen cotton may give way to wool. The sanitary authorities who are so urgent in advising us to wear flannel under-garments instead of linen and cotton, say that we should be healthier and stronger, less likely to take cold, to suffer from bronchitis and ague, and to be attacked by rheumatism, if we were to give up cotton and linen sheets altogether, and to sleep between the blankets. A physician of position expressed the opinion not long ago, that if housekeepers would give up using sheets, rheumatism would not be nearly as common as it is. The consequence is that a great many people now dispense with sheets entirely, and the idea of doing so is spreading. Mothers who do not object to let the grown-up members of the family sleep in sheets, are most careful that children should have thin blankets only on their beds; and as the difficulty associated with using blankets is that wool takes more drying after washing than cotton does, manufacturers provide very thin cashmere sheets, which can be easily dried, to occupy the place of the twilled cotton lately used. The change thus brought about involves a little more trouble to housekeepers, but there is no doubt that it is a good one from the health point of view. Wool is more healthful than cotton, and if we were all to adopt it we should undoubtedly reap the benefit.

Sanitary authorities may, however, talk as they like; the number of housekeepers who will carry out their theories is at present, and will be for a long time to come, comparatively speaking, very small.

For the most part housekeepers prefer to go on as they have been accustomed to do. Those who have a prejudice in favour of linen, and who can afford to buy it, use linen, and expatiate on its luxurious coolness and its delicious "feel." Those who believe in cotton, remain constant to cotton, and rejoice in its warmth-giving qualities and its cleanliness. What we have to do, therefore, in speaking of house-linen here, is to consider linen and cotton only. The probability is that for a great many years these fabrics will be most generally used.

Linen is dearer than cotton, but it is also more durable and keeps its colour better. The finer, the more even, and the more closely woven linen threads are, the better is the fabric. While granting this fact, it is well to remember that linen sheets, though fine, should be fairly heavy. Very thin linen sheets are apt to roll up. One of the difficulties connected with choosing linen is that it is very frequently adulterated with cotton, and when the linen is new the mixture is not easily discerned. The best thing that the housekeeper can do to avoid mistake in this direction is to buy the linen of a thoroughly respectable dealer. If there is any doubt as to the purity of the material, a little piece should be procured as a pattern and placed under a magnifier. If then it is found that the threads are uniformly small, round, and jointed, it may be taken for granted that the material is pure linen. If, however, some threads are round and jointed, and others flat and shrivelled, there will be reason to suspect adulteration. The following plan for testing the purity of linen has also been recommended by an authority, as simple and easy of application:—Take a small piece of the cloth and soak it for a couple of minutes or more in a boiling mixture of equal parts of hydrate of potassium and water, contained in a vessel of silver or glass. Take it out and press it between sheets of white blotting-paper till it is perfectly dry, then draw the threads apart in every direction. The white or pale yellow threads will be of cotton; and the dark yellow threads of linen.

Whether, however, sheets are made of linen or cotton, it is most important that they should be of the right length and width; for they should be long enough and wide enough to permit of being well tucked in and to remain tucked, no matter how much the sleeper may toss and turn in bed. The width of sheets must, of course, be determined by whether they are wanted for single or for double beds. Even for a cot they should be 51 in. wide; for a single bed of ordinary size, 72 in. wide; and for an ordinary double bed, 90 in. In length sheets should not be less than 2½ yards after hemming, and an additional ¼ yard would be an improvement, and ½ yard a luxury. This length does not provide for

rolling the sheets round the bolster. When this is needed, another ¾ yard would be required. But when the comfort of a bed is considered, it is necessary that bolster-cases should be provided. These are now regarded as somewhat old-fashioned but they promote tidiness, economy, and comfort. Housekeepers who are laying in a stock of house-linen are strongly recommended to buy them, and not to be induced to dispense with them. The method now so usually adopted of wrapping the sheet round the bolster is not at all a good one, and is a misery to many people. As the occupant of the bed moves, the sheet gets dragged from its position, and everything gets out of place. Some dispense with bolsters altogether, and in their place have a double set of ordinary pillows.

When cotton sheets are preferred, it is well to remember that unbleached cotton is warmer than any other, and that twilled cotton wears better than any other. Twilled cotton is in these days made of such superior quality, and finished so well, that it scarcely leaves anything to desire. Good sheets should be provided with doubled hems; and, to look handsome, these should be not less than 1 in. wide. Some ladies are very particular to have the top hem of a sheet broader than the bottom hem; and before sewing-machines were invented industrious housekeepers used to hem-stitch the top hem, arranging it so that the stitched side should be seen when the sheet was turned down; or else to fold the hems double, and then seam instead of hemming them. Either method had the advantage of making the top hem of the sheet distinct from the bottom hem, and this helped to keep the top of the sheet to the top of the bed: a very desirable result, since no one who thought of it would care to put the face where the feet had been.

Even when housekeepers prefer that the sheets for their beds should be made of cotton, it is advisable that pillow-cases should be made of linen, because linen is cooler for the head, and a hot pillow tends to prevent sleep. No one who had felt the luxury of a linen pillow-case, as compared with a cotton one, would ever lie on the latter, excepting when there was no choice in the matter. When people cannot sleep (and the trouble is a very usual one in these days), the reason frequently is that the head is too hot, owing to a too great rush of blood thereto, caused by excitement, over-fatigue, and worry. Under these circumstances anything that makes the head cool helps to induce sleep. One of the accepted cures for sleeplessness is binding a wet cloth round the brow; and the idea in this cure is that the cold water relieves the congestion. A cool pillow answers the same purpose; and very often when people are restless and disturbed, the mere turning of the

pillow, if the case is made of linen, will be soothing and quieting. Housekeepers of experience are always in favour of linen pillow-cases.

Pillow-cases should, of course, be made to fit the pillows to which they belong, and pillows vary in size. Pillow-cases, like sheets, should have hems not less than an inch wide. These cases are fastened either with tapes, or with buttons and button-holes. The latter are much to be preferred, as they are both tidier and more durable. Bolsters look handsomer when their cases are rounded at the ends instead of being straight. The way to accomplish this is to make a hem at the end, then put two eyelet holes at a little distance from the edge, through which a running tape or ribbon can be passed to draw the ends together. Careful housekeepers are always particular to cover both bolsters and pillows with a long-cloth case, which is sewn on, and which can be taken off and washed when bed and mattress covers are washed, at the time of the spring clean.

It is very usual in these days to have what are known as "pillow-shams"—that is, ornamental pillow-cases intended to be used during the day, and removed at night. When pillow-shams are used, the pillows are placed outside the counterpane, and the shams are made of fine linen, sometimes embroidered with an initial or a monogram, or with a fanciful design in crewels; or they may be made of muslin lined with cambrie, or elaborately trimmed with frillings. When tastefully made, the shams certainly help to make a bed look dainty and inviting, and the bedroom pretty and comfortable. They are not expensive, because, when carefully folded and laid away every night, they remain clean a long time. This fashion of using shams comes from America, but it has of late become very popular in this country.

It should never be forgotten that the durability and daintiness of sheets and pillow-cases depend largely upon the care they receive. They should not be allowed to get too dirty, or they will become a bad colour; yet at the same time too frequent washing wears them as soon as anything. They should be looked over and examined before being sent to the wash, and slight rents should receive instant attention. If dealt with immediately, mischief of the kind can be made good with little effort; but if linen

is sent to the wash in an imperfect condition, the rent is sure to become worse. It is important also that sheets should be well aired after washing. If left even slightly damp, they will become mildewed, and this will quite spoil them, to say nothing of the danger that those in actual use may cause colds. Regular use is one way of preventing mildew, and it is therefore a good plan to keep linen in a pile, to keep pairs both of sheets and pillow-cases within each other, and to place the pair last used at the bottom of the pile.

The custom of putting lavender and other perfumes between sheets is somewhat falling into neglect; but it is a great pity that this should be, for nothing can be more delightful than to sleep between sheets that are daintily perfumed. It is, moreover, very easy for the housekeeper to provide herself with small sachets, made in the shape of a cushion (Fig. 1), of white linen or of silk, and to fill these with dried lavender-flowers in September, when these are in season, or, if preferred, with a mixture made half of orris-root and half of dried heliotrope-flowers. The orris-root is really the dried root of a particular species of iris (*Iris florentina*). It acquires its scent when drying. The dried root can be bought

of the herbalist, and powdered orris-root can be bought at the chemist's. The heliotrope everyone knows. Lavender-stems, bound in small bundles with dainty ribbon (Fig. 2), will also give out a pleasant perfume. That lavender has long been used for putting between sheets and folds of linen by English housekeepers, is evident from the fact that the rural poet Shenstone, who lived about two hundred years ago, made reference to it in his poem describing the garden of the Schoolmistress. He says:—

"And lavender, whose spikes of azure bloom

Shall be awhile in arid bundles bound,

To lurk amid the labours of her loom,

And crown her kerchiefs clean with mickle rare perfume."

The making of these "arid bundles" is one of the accomplishments of which cottagers in certain country districts are still very proud.

The number of sheets and pillow-cases provided must, of course, be determined by the means of the owners. Yet even where means are limited, it is worth while to make an effort to have a good supply



Fig. 1.—SACHET OF LAVENDER.



Fig. 2.—LAVENDER-STEMS.

of bed-linen, to be ready in case of illness. This is a misfortune which is sure to enter a house sooner or later; and none but those who have had experience know what a number of sheets and pillow-cases are needed, even during a short illness, nor what a trial and discomfort it is to be short of bed-linen in an emergency of this kind. For ordinary purposes, and for householders of comfortable means, it is generally understood that three pairs of sheets, three pairs of pillow-cases, and three bolster-cases are required for each bed—that is, when each bed uses its special sheets, and none other. Some housekeepers make a great point of keeping sets of bed-linen for each bed; and when this plan is adopted, the sheets, &c., are marked in the corner with the name of the person who is to use the sheets, or with the name of the room which contains the bed.

When, however, sheets are used generally, and given out according to need, a smaller supply is sufficient. When the stock is small, many housekeepers make it a rule to change the linen of one half the beds one week, and of the other half another week. It is not uncommon for those who have to manage on a limited supply of bed-linen to calculate that five pairs of sheets will be needed for three beds, although four pairs would be needed for two beds. The advantage, however, of having three pairs of sheets for each bed is that each pair can lie for a while between the times of wearing, and this makes them last longer. It should not be forgotten that linen which is in constant use wears out much more quickly than does linen which is used in moderation. Even linen serves us best when it has a reasonable allowance of rest.

When cotton sheets are so old that they are past mending, they are often converted by thrifty housekeepers into dust-sheets; or excellent bags for holding best dresses can be made of them. Also they are frequently made into dusters. There is no reason against this. Of course, handsome dusters are for sale, but there are hundreds of households where a duster is not bought from year's end to year's end, simply because the housekeeper objects to waste. The chief point requiring attention when dusters of this sort are used, is that they should be carefully hemmed. It is dangerous to use dusters that are torn and frayed at the edges for ornaments and fancy articles, because they may catch and cause breakages. Yet, apart from this, there is no surer sign of slovenly housekeeping than the employment of rags as dusters. Dusters which are not respectable are not respected by servants, but are dirtied and thrown away, or burnt. This of course leads to disorder and waste. Old linen sheets are too valuable for dusters; they should be kept for wounds and surgical cases.

In order to keep up the supply of bed-linen, thrifty housekeepers whose means are limited often make a practice of buying a set of sheets or a pair of pillow-cases at short fixed intervals, and the plan makes difficult purchases easier than they otherwise would be. Under ordinary circumstances, however, mid-winter is the orthodox time for renewing the stock of bed-linen.

Counterpanes.—There are in these days many sorts of quilts and counterpanes. Once of a day housekeepers used to make patch-work quilts, and later they would knit quilts, for family use. Now home-knitted quilts are seldom seen, although imitation knitted quilts, fringed, are usual. The well-known Marseilles quilt is so much liked that it will not readily go out of fashion. It is handsome, but rather heavy, and this is a disadvantage. Coverlets of chintz or of Madras muslin to match the curtains are sometimes liked; and a dainty coverlet for summer wear can be made of washing silk edged with lace; or lace is lined with coloured satins. Charming coverlets are also made by clever fingers of Bolton sheeting worked in crewels in a fanciful design. Whatever the coverlet may be, it is probable that many people would wish to have also an eider-down for winter. The worst of these most comfortable appendages to a bed is that, after washing or cleaning, the colours of the material fade, and then they look shabby before they are half worn. To preserve them, it is a good plan to have a loose cover of flowered chintz or sateen, to fasten with buttons and button-holes, and this can be slipped on and off as required. An American writer, Miss Church, says: "A very nice and economical 'comfortable' for a bed can be made of white paper-muslin, the glazed surface of the material preventing it from becoming easily soiled. About eight yards of muslin and three bales of cotton batting will be required for it; and this, with a pair of good blankets, will be sufficient covering for most people for the coldest weather. Pink or blue muslin may be used in place of white, and tufted with worsted to match."

Table-Linen.—There is so much choice in table-linen that it is difficult to say what should be bought. Would-be economisers, however, as well as those who wish the table to look handsome, should be careful to buy double rather than single damask, because it wears so much better, and, though dearer to begin with, is cheaper in the end. It is better to have two good table-cloths than four inferior ones. Inferior damask may, and probably will, look very good when new, but its beauty will vanish after washing, and it dirties quickly when in use. Double damask is higher

in price than single damask, but it wears twice as long and looks much handsomer. In choosing table-cloths it is a sign of excellence that the pattern should be thoroughly well marked. Spots and sprigs and uniform running patterns are cheaper than those which have a design in the centre and a border. Patterns which have been some time in the market are also almost always cheaper than are those which have been recently designed and manufactured, yet the newest patterns are not necessarily the prettiest. Material for table-cloths may also be bought by the yard, and this material wears better than do table-cloths of a small size. For daily use strong unbleached damask table-cloths are much approved by economical housekeepers; they wear well, and become whiter each time they are washed. If a table-cloth is to look really handsome, it must be long enough to hang down three-quarters of a yard at each end of the table. Housekeepers who think this allowance extravagant will doubtless content themselves with half a yard at each end. Very excellent table-cloths may be made of good and fairly heavy linen sheeting, which has been fringed and knotted at the ends. Table-cloths with coloured borders are also much approved by some people, and manufacturers will frequently for a small extra charge have linen specially made to order with the monogram or crest worked into the pattern.

Napkins—or *serviettes*, as they are called—should, of course, match the table-cloths both in pattern and quality. A few years ago, when it was more customary than it now is for gentlemen to tuck the corner of their napkins under their chins, oblong napkins were the rule. But now housekeepers have discovered it is so much easier to fold square napkins than oblong ones, that the latter have fallen somewhat into disuse. Both, however, can be procured at good shops. To be of service, napkins

should be large enough to cover the knees and hang down a little. The most usual sizes are about 22 in., 27 in., and 31 in. square. It is a mistake to have very small table-napkins.

When possible, it is very desirable to have separate cloths for breakfast, for luncheon, and for dinner. One advantage of the arrangement is that

it permits of table-cloths, &c., which have been used being put into the "press," an article which, for economy's sake, ought to find a place in every house. These presses are, of course, made with drawers (Fig. 3), and such are very useful for storing linen, if this is needed. They are also made, however, at a less price, without drawers, to stand on a kitchen table. Table-cloths and dinner-napkins which are carefully brushed, neatly folded in their original folds, and laid in the press for a few hours, come out looking as if they were fresh from the laundry; and table-linen thus cared for lasts twice as long as does that which is simply folded and put in a kitchen drawer—to say nothing of its looking handsomer all the way through.

Besides table-cloths and dinner-napkins, there

are smaller items of table-linen not to be passed over—such as "slips" for putting down the side of a table, to be removed before the dessert comes on; carving-cloths, to be placed under the meat-dish when the joint is put on the table; sideboard-cloths; tray-cloths; centre-pieces; d'oyleys for finger-bowls and dishes. Slips are, of course, as long as the table-cloth, and they are from 22 in. to 27 in. wide; for a carving-cloth 30 in. by 40 in. is a good size. Centre-pieces are either of fancy material or of fine white linen daintily embroidered. Tea-cloths and d'oyleys are of infinite variety; the artistic taste of the feminine members of a household is usually displayed in articles of this kind. Careful housekeepers generally manage to get the smaller cloths, such as tray-cloths and sideboard-cloths, out of old table-cloths;

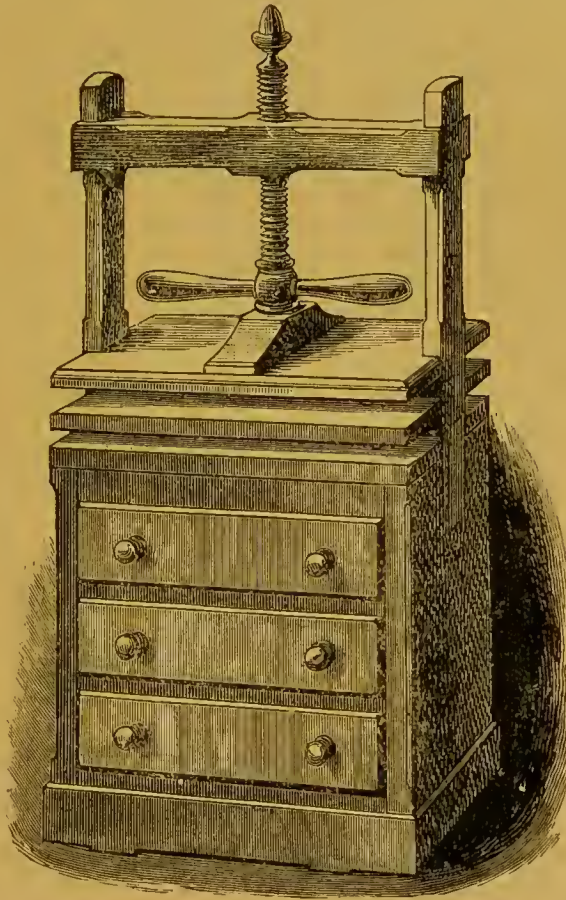


Fig. 3.—LINEN-PRESS WITH DRAWERS.

while for fish and pastry, paper d'oyleys are very commonly employed. This is really a very good thing, because damask is apt to become discoloured after it has come into contact with cooked food; and few cooks are as careful as they might be to lay damask d'oyleys into cold water as soon as done with. Pretty dish and dessert papers, both round and oval, are to be bought of any fancy stationer from about 9d. a dozen, and cheaper by the gross. These are very convenient for special use, while for every-day use housekeepers may easily cut sets of papers to fit their own dishes out of thick white cartridge paper. To do this, they would need only to fold a sheet of paper in four, place the point thus folded in the centre of the dish to be fitted, press the paper into the dish to mark the position of the inner circle, then cut it out in scallops without opening it. Paper d'oyleys of this sort look quite tidy, and cost a mere trifle.

Whether or not separate table-cloths are provided for breakfast, luncheon, and dinner, it is most necessary to have separate linen for kitchen use. It is very false economy to have kitchen table-cloths of inferior quality. They may be coarse, but they ought to be good, because, as housekeepers of experience know, the harder the wear is likely to be, the more necessary it is that the fabric should be durable. Moreover, every assistance should be given to servants to make their meals comfortable and inviting. The mistresses who try to promote the comfort of their domestics have a right to expect that their domestics will in turn respect their belongings.

The supply of table-linen must depend upon the means of the householder, and also upon the arrangement of the meals. It is almost impossible to give a suggestion on this point, because people's ideas differ so much. There are housekeepers who think themselves most handsomely provided with one large table-cloth of super-excellent quality with napkins to match, one good breakfast-cloth and four table-cloths with two dozen napkins to match, and two kitchen table-cloths; there are housekeepers who think themselves in miserable plight because they have only four average table-cloths for each meal, with three dozen napkins to match, and two cloths for each meal of extra quality with two dozen napkins of equal value. Nevertheless, when it can be obtained and maintained, the supply just detailed is a very workable one. Unless they can be cared for and kept closely guarded, too many table-cloths are an anxiety rather than a comfort, and, unlike sheets, they are not likely to be wanted on an emergency. At the same time, when table-cloths and napkins of extra quality are possessed, they should be kept apart from the ordinary table-

linen, wrapped in white paper, and labelled. Unless their superiority is respected, their beauty will soon be lost.

Towels are a very important part of household effects. There is room for difference of opinion as to whether or not linen or cotton should be chosen for sheets, but there is no doubt as to the superiority of linen for towelling. Towels are kept for drying purposes, and linen will take up moisture better than cotton, and the consequence is that one linen towel is of more worth as a dryer than two cotton ones. When new, cotton towels often look as if they would be excellent; but after being used and washed two or three times they become soft, limp, and worthless.

For every-day use, linen huckaback towels are excellent. The unbleached ones, which feel thick and look loosely made, wear the best. People who have a partiality for soft towels often prefer linen diaper to huckaback. Diaper does not, however, take up the wet as well, while huckaback gets softer every time it is washed. Towels are very usually sold by the dozen, and fringed at the ends. Many housekeepers prefer them thus. If towelling is bought by the yard, thirteen yards should be allowed for the dozen, to make up for the quantity taken up by the hems. A towel that is too short is very unsatisfactory, because it is always slipping off the towel-rail, and there feels to be too little of it when it is in the hand. A good towel should not be less than thirty-six inches long, apart from hem and fringe; and it would be all the better if it were forty inches long. When it is possible, it is well to have separate towels for each bedroom, and to have them marked accordingly.

Toilet-Covers are usually bought ready made, or they are sold by the yard under the name of "toileting." The ready-made covers are, as a rule, a delusion. The fringe soon gets to look shabby after washing, and this robs the article of its beauty. The toilet-covers which have the prettiest effect are those made specially for the room, to match the curtains or the counterpane. Very charming toilet-covers may be made of coarse white linen, to fit the furniture exactly, and trimmed with Torchon lace. Madras muslin, with frills of the same, also makes good toilet-covers. The hems of these covers should be worked by hand, not by machine. Covers of this kind will be rather more costly to begin with, but they will wear three times as long as the ordinary toilet-covers, and they will look dainty all the time. Thrifty housekeepers very often put marbled oilcloth in boys' bedrooms, and places of the kind, where there is likely to be rough wear.

The stock of household linen is not complete when the needs of bedrooms and tables are supplied. There are towels and cloths of various kinds indispensable for kitchen use, and it is much more possible to get along with a limited supply of sheets and table-cloths than to keep house properly with an insufficient amount of kitchen towels, roller-towels, glass-cloths, tea-cloths, dusters, knife-cloths, grate-cloths, dust-covers, hearth-cloths, and similar articles.

The number of towels needed in a kitchen will, of course, depend on the size of the family and the amount of cleaning to be done. It is a mistake to have a niggardly supply, because it makes cleaning difficult, and it tempts a servant to take small soiled table-cloths and dinner-napkins into use in the stead of towels. It is as great a mistake to give out goods of this kind haphazard, without keeping count of them. All household cloths should be hemmed, marked, and numbered, as exactly as sheets and table-cloths are marked and numbered. They should not all be given out at once; but they should be given out at certain intervals—say, every Saturday morning—and the dirty ones should be counted for the wash before the clean ones are taken into use. When they fall into rags, new ones should take their place, and the old ones should be converted into grate-cloths, boot-cloths, knife-cloths, and sink-cloths. When there is more than one maid in a household, careful housekeepers often make a practice of having towels of a different pattern or with a border of a different colour for each one. The same method may be adopted with regard to dusters. Each servant might have dusters of a different pattern and colour, and one set might be kept for the bedrooms, and another for the sitting-rooms. This would do much to preserve good furniture and costly ornaments from being rubbed with a dirty duster. The establishment of a habit of this kind enables the housekeeper to see that the towels and dusters have been properly used, and that they have not been allowed to get too dirty. Also it is a safeguard against their being lost or thrown away. In well-appointed houses housemaids are provided with basin-cloths with different coloured edges; then one set is used for the basins, and another for the chambers. These cloths should every day, after being used, be rinsed in hot water and soda, and they should then be hung in the air to dry. It is desirable also to have half a dozen strong cloths, to be made of coarse huckaback or Russia crash, for rubbers. Every housekeeper knows that oilcloth which has to be washed wears longer and fades less if it is wiped dry than if it is left to dry of itself, and that carpets look much fresher and brighter if they are rubbed after being swept; yet if an ordinary towel were used for a purpose of this kind, it would be in holes directly. It

is worth remembering that the number of towels needed in a kitchen will be much lessened if a plate-rack is used. The use of a plate-rack has been recommended in a former article on "The General Management of the Kitchen;" but it should be stated here that a rack is not only a convenience, but it promotes economy, by sparing the linen-press.

Pudding-cloths should be kept quite apart from other kitchen cloths. For health and safety's sake, they should be treated with dainty care. If allowed to become mouldy or fusty, they may serve to convey disease to those who eat the puddings boiled in them.

The systematic marking of household linen has a great deal to do with its preservation. What is wanted here is the information which will enable the housekeeper to see at a glance to what set a special article belongs, and when the set was bought, so that she may know how long it has been in wear, and to what use it should be put. These ends may be attained by adopting the following method. We will suppose the article to be marked is a table-cloth, one of a set of twelve bought in 1896, and intended for luncheon; it might then be marked thus:—

LUNCHEON.

1. JOHNSON. 12.

/96.

The figure 1 here would be the number of the article; 12 would show how many there were in the set; and /96 would indicate when the goods were purchased.

The advantage of numbering the various articles is that if one of a set is missing, it is more readily traced than would otherwise be the case. Also it is best to mark with ink rather than with thread, because stitches can be so easily picked out.

In a previous article devoted to "The Care of the Wardrobe," attention was called to the desirability of linen being kept in the linen-press. Here it may be further urged that one of the surest ways of preventing the extravagant wear of linen is, not only to keep linen in the press, but to keep the press itself under strict supervision. To this end it is an excellent plan to have the shelves of the linen-press numbered, and then to keep on one of them a memorandum book with a pencil attached, in which book the entire contents of the closet can be entered, and the number of shelves given, with a statement of what each one contains. Any addition, diminution, or alteration of the supplies would, of course, be set down as soon as they occurred. If a book of this sort were kept up to date, it would render the care and supervision of household linen perfectly easy.

REMOVAL OF FURNITURE.

MOVING from house to house is a very trying business, that puts an enormous strain on the strength and endurance of all concerned in it, besides causing endless worries and, in almost all cases, doing a great deal of damage to the things removed. In many cases the contractors for the removal undertake to make serious losses or injuries good: but there are a thousand and one little damages that only become visible to the householder during the process of settling down, or where items come gradually into use again after weeks or months in which there was neither time nor inclination to employ them. Such small injuries are scratches and rubs on polished surfaces, the knocking-off of knobs and beadings, bits of mirror or picture frames, and all sorts of things that at once convert an article of furniture from good condition to imperfection, and ruin its chances of fetching anything like proper value if sold by auction at any time.

Preliminaries.—The first thing is to decide as to how the furniture shall be taken to the new abode. This last is not very difficult in these days when contractors abound; and their huge vans, that travel by road or rail, are fitted with many conveniences for the purpose of taking breakable articles—pictures, &c. But there are still cases in which they are not available—as, for instance, when a farmer moves his goods and chattels a few miles across country to another farm, and utilises his own waggons and horses for the purpose; or in our colonies, where so many live, who have to resort to the most primitive contrivances when compelled to remove their household goods.

One great preliminary to a move is the elimination of the rubbish that is sure to accumulate in every house during months or years of occupation—the broken and hoarded crockery, on which servants seem to set so much more store than on that which is whole; the old muslin curtains kept for possible plasters and poultices, or to “strain the starch;” the worn-out, or out-grown, or ill-fitting clothes; the broken chairs; and the burnt frying-pans, sauce-pans, and kettles, that are not worth the expense of new bottoms to them. No one seems to be strong-minded enough to cast these articles away, and though in the country they may only be put on one side till the tinker calls, they are too often forgotten when that functionary does make his periodical visitation.

All curtains should be taken down some little time previously; the white ones, that are worth it, washed or sent to be cleaned, and the stuff ones brushed, shaken, and perhaps sent to be dyed or

cleansed. This insures their being ready to put up in the new house, fresh and clean, at an early opportunity, and avoids the carriage of dirt, which is worse than unnecessary. Carpets, too, should be taken up and beaten, a process that can be managed by the servants where there is a good-sized garden with a lawn or a handy paddock, but which in towns is best done by some firm that undertakes it. Chinney sweeps, who do odd jobs, frequently provide themselves with a truck, and stick a bill in their windows setting forth that they beat carpets; but this entails taking them to some bit of waste ground, where they are likely to pick up worse dirt than that already in them. The steam-cleaning works are best when available, as they are in or near any large town; for they send for carpets, cleanse them thoroughly, return, and frequently, for a small charge, relay them. The price, per square yard, of cleaning carpets by steam is threepence, but if submitted to a steaming and cleansing process that kills any moths, fleas, or other insect-pests, and revives the colours, the cost is ninepence per square yard. This is especially desirable for Turkey carpets and those of similar make, which, however, often get much torn in the process. In fine warm weather, where there is grass, and Brussels and other carpets can be treated at home, it is a good plan to wash them over with water and ox-gall, as described in a previous chapter, but they must also be carefully examined when brought in, for caterpillars of the outdoor kinds have a wonderful facility for fastening on any woollen fabric that comes in their way. If undiscovered, they not only work havoc on the carpet or blanket, but will transfer themselves to other articles. We have seen a handsome ostrich feather, on a hat hung in the hall, eaten away by a large caterpillar that, no doubt, had been brought into the house with some curtains that had been aired in the sun in the garden.

A new or fresh house, however much it may have been painted and papered, is sure to require a thorough scrub from top to bottom; not such an one as the workmen give, but a *servant's* cleaning, with soap, soda, and brush; and it is therefore desirable to obtain possession a day or two before the actual move takes place, though where one family moves out, say at Michaelmas, and another comes in, this is not always possible. Sometimes the outgoing tenant cleans, and it is generally considered that this should properly be done before the house is handed over. But even this never satisfies, and never should satisfy, the new occupier, whose own servants or a good charwoman should give the last final cleaning-down before occupation. Then the carpets can be

laid down in the principal rooms before the actual day of moving, and all will be ready for putting tables, chairs, &c., in their proper places.

This can only be done, when the move is to a considerable distance, by having the carpets so packed that they are the first things taken out of the van. Then if a responsible person has acted as pioneer and reached the new house, armed with a pound or so of carpet-tacks and a couple of hammers, the carpets may still be the first things put in their places, thus preparing the way for the others.

Some methodical persons, comprehending that no one can be in two places at once, prepare for a move by writing a quantity of cards very legibly, with the words "Dining-room," "Drawing-room," "Front Bedroom," and so forth, and tying one on to each article of furniture. This must be done when the furniture is *in situ* at the old house, in order to avoid confusion. It ensures, to a certain extent, the furniture being placed at least on the proper floors, and, to a great extent, in the right rooms, and saves much carrying to and fro afterwards. The only other way is for someone who knows to remain about the doorway of the new house, and direct the men where to carry every article as it is brought out of the vans.

Estimates.—The plan universally pursued, after intimation has been given to a firm that there is furniture to be removed, is for an experienced person to call and go through the rooms, after which he is able to say how many vans will be required. Most London firms always estimate for the Pantehnicon vans, which are now in general use. They then, if removal is to a distance, have to write to the nearest railway-station at each end of the journey, and ascertain the rates, which differ on the different lines, and even on different portions of the same line. To these have to be added costs of cartage, of horsing the vans at either end, men's wages, keep, &c.; and the result is put in a round sum before the applicant, who has to decide whether he will accept it, and generally to sign a form, which is practically an agreement binding on both sides.

The large firms of house-furnishers, who do a great deal of the removing in London and other large towns, do not consider that they get much profit out of removals; but they oblige their customers, and one thing fits in with another, especially if it happens that the vans that take the goods of Mr. S. from London to York are able on the return journey to bring those belonging to Mr. O. from York to London. Firms that concern themselves simply with removals, generally have warehouses in which, at certain fixed rates, they store the belongings of their customers when required; and families giving up housekeeping for a time are often glad of such

a place, though it is rather an expensive way of storing furniture.

It is almost impossible to give any idea of the cost of removal, because every firm has its own prices; and one will ask as much as £36, when another will only ask £15, for a van-load! This startling difference is taken from an actual case in point; but it should be said that the removal was from one town to another at a considerable distance. Removals entirely by road are cheaper than by rail for anything like reasonable distances, because contractors use very large vans by road, which will not go under all the railway-bridges and through the tunnels. Country firms are often able to offer very low terms for removals, and have vans of all sorts and sizes; but the drawback usually is that they have only one or two skilled packers, and these cannot be ubiquitous. Any artisans or labourers wanting a job are then called in to assist, and do it after their fashion, carrying out perhaps a jug in one hand and a poker in the other; and where any article of brass or bronze can be unscrewed and taken apart, they are sure to do it, and deposit the portions in opposite corners of the van.

The following is a fair sample of agreements and regulations for removal:—

"Our charge to remove your furniture, &c., as shown, by our vans from London to York, will be so-and-so, including experienced men to load and unload; take down and put up bedsteads, wardrobes, and mirrors; pack and unpack china, glass, ornaments, books, with use of (if required) cases, crates, mats, and wrappers; men's time, travelling expenses, railway carriage, cartage, and all other expenses from house to house.

"A portion of the property, consisting of plain furniture, kitchen utensils, luggage, &c., will if necessary be conveyed in the railway company's trucks as loose goods, our own men loading and unloading the same. Should you favour us with your orders, the same shall receive our best attention. Awaiting the favour of your reply,

"N. & M.

Conditions and Regulations upon which the Property is Removed.—1. The rates quoted may not apply if not accepted within twenty-one days from date, and are based upon the understanding that the work, when commenced, will be carried on and completed under the direction of the contractors without interruptions, which, if allowed, will increase the cost.

"2. The rates quoted include risk against breakage (railway accidents excepted) not exceeding ——— on any one article.

"3. No agents or men employed by the proprietors have any authority to alter, vary, or qualify in any way the terms of this estimate; nor enter into any

contract on their behalf; nor sign any receipts or documents that have not been previously submitted to the firm; and contracts, &c., so made will not be recognised.

"4. The proprietors undertake to effect insurances against all risks of accident, and give a special receipt to cover them, on payment in advance of an insurance rate, accompanied by a written declaration of the value of the property to be removed.

"5. No servants in the employ of the proprietors are allowed under any circumstances to solicit gratuities; and in the event of any incivility or negligence of duty on their part, the firm will be obliged by its being reported to them by letter."

Packing.—In most cases, whatever may be said to the contrary, it is wise for any member of the family who is an expert packer, and who is also sure to have the unpacking to do, to pack small and delicate china of any value. Such things go very well in boxes or drawers, that may be filled with whatever clothes are not in wear at that season of the year, especially with children's little garments. Where there are skilled packers and Pantechnicon vans, it is a good plan to lay clothing and linen in drawers, first of all laying in one or two large towels hanging over the front. When the drawers are full, these towels are turned back over the contents, and slightly tucked in at the back and sides. This is neat, and forms a certain amount of protection. The men carry out the empty shell, place it in the van, and one by one put the drawers again in their places.

When a contract has been made with a good house, the ordinary glass and china is much best left for their men to pack in crates which they bring for the purpose; but the housewife who has to trust to the ordinary waggon or dray of our own country or the colonies, will have to pack every breakable item herself in baskets or crates, and will probably utilise her clothes-baskets and hampers for the purpose. With smaller men, whose packing capabilities are less certain, it may be best to get the contractor to leave at the old house a sufficient number of strong hampers in which the ware can be packed away. It is wonderful what a difference skilled packers make during the whole process of removal. Two such men will get half as much again into a van, packed more steadily and safely, and in much less time than unskilful labourers.

It will often save a great deal of time wasted at the nearest public-house, and perhaps prevent excess, to provide a good substantial lunch for the men, of bread-and-cheese and beer, letting it be known that such will be ready at a suitable hour. The cost is but small, and when the removal is from one suburb

to another of a large city, and is, if possible, to be effected in one day, time is invaluable, and an hour saved may make all the difference in getting to bed that night in decent time. Some good tea at the other house may help matters along in the same way.

Where there are mirrors and pictures to pack, the men are always glad of as many blankets, pillows, mattresses, and other soft things as they can have, and a store of old newspapers should always be provided if possible. A great many wrappers, mats, &c., are invariably brought with the vans, but many more are wanted, and straw and hay often come in very useful. Where there is wine to be packed, it is generally done the very first thing, and the ordinary charge is 1s. a dozen extra.

It is not fair to put packed boxes and trunks in a van that is going a long distance. They form dead weight, and some firms have a clause prohibiting it. They can usually go as the luggage of any part of the family who make the journey by rail, or can be despatched at a cheap rate by goods train. Books are best packed by their owners, especially if they are book-lovers, and they are extremely heavy things to carry about. Good-sized wine-cases without divisions are very suitable when lined with newspaper, but calf-bound books should each be wrapped in paper to avoid ugly scratches and rubs. In spite of all the hard things said by Professor Ruskin about lending libraries, it really is wisest for people who have very little more money than they need, only to buy a few standard books, and depend on a library subscription for the literature of the day. If they are addicted to frequent removals, or compelled to lead a wandering life, the saving in the carriage of books will more than pay a liberal library subscription.

Diminishing the Cost of Removal.—If on removal from one house to another there is new furniture to be bought, or old furniture to be done up and re-upholstered, it should be done, if possible, by one of those firms that undertake to deliver all goods carriage free at the nearest railway station in the United Kingdom. They do this on very easy terms to themselves, because they are such good customers to the railways that they are to a certain extent masters of the situation. Suppose that a sofa and a dozen chairs require re-seating or re-covering, and one or two new carpets are wanted, these will not have to be reckoned for in the vans, and the saving will be considerable.

Pianos.—When a piano has to take its chance by being removed with other furniture, the legs ought always to be well covered with paper, tied on with string, and the body carefully covered with blankets or some woollen material, so secured that there is no

likelihood of its coming off. The packers cannot be expected to do this, and it should always be the care of one of the family or of a careful servant. The really best plan, however, is for a piano to be put in a proper case by a piano-maker, who knows better than anyone else how to pack it, and in such a case it can travel safely quite independently of the van. It is a pity to run any risk with a fine, and perhaps favourite, instrument.

Times for Moving.—Choose not alone a proper house, but proper time for moving, is one way in which to travesty a well-known adage. The exact quarter-days are the busy times for all who contract for removals; and the longer the notices given them, the better can they arrange their affairs. The times between, and the half-quarters, when the vans are in less demand, are those when moderate prices are charged; and all who wish to be unhurried in their movements will, if possible, choose these seasons for their “fittings.” By far the greater proportion of removals take place at either the March or September quarters; and it is worth remembering that September is much the warmest, for the new house is generally terribly cold and comfortless till things are in place; and to an invalid the weather may make a great difference. Of course no one would think of moving in December if he could help it; but there seems no reason why June should not be adopted, and the long days are a distinct advantage.

A Local Removal.—Let us consider now very shortly the most common case, of a removal to another house not very far from the same neighbourhood, where it is necessary to get settled in, somehow, the night of the same day on which the old house is abandoned. We write from repeated experience, when we say that in the case of an ordinary family this can be done easily if the contractor employs decent men, and proper method is pursued; but the *men* cannot find the “method” beyond their own proper business of packing and unpacking. That must depend upon the heads of the household, and it is easy to sketch briefly what should be done. The new house will have been cleaned down, and the carpets fitted and laid in the reception rooms, with coarse matting or drugget laid over each from the door of the room, to save dirt from the feet of the men. Curtains, blinds, and mirrors will if possible have been taken down at the old house; also all pictures, so that the men may begin the work of packing at once. That is about all which can be managed the previous day.

The first thing of importance is to arrange for the vans and men employed to be on the spot *early* on the day of removal; and this is one reason for em-

ploying a contractor somewhere near, if such can be found of responsible character. In that case, it is generally possible to have all at the door by seven o'clock; and the household should be up, and breakfast early, both to clear away and, if necessary, help the men to carry things. A stout girl or a couple of lads can do a great deal to help in this way in the early hours, but must not attempt to put things in the vans, leaving the men to do all this in their own way, after explaining what articles are to be arranged for unpacking first. The lunch-hour should be arranged as above remarked, so that the men may know *when* they will stop, and not be left to fix this without anyone else's knowledge. If they come early, lunch must be early, or they will be restive. It takes much longer to pack than to unpack; and if the last of the vans can be got off somewhere about four o'clock, things will promise very well for any removal within a pretty short radius. An hour later need not cause much anxiety on this score; and even if it is six before the old home can be locked up, all the family may probably be in bed at the new one before twelve. That is, of course, supposing the journey itself does not take up much time.

Except in the case of an invalid, those at home the day of a removal should be content with cold refreshments, provided either the day before by the cook or with the aid of a confectioner. As soon, however, as the back of the work is broken, a servant should go over to the new abode with a few simple utensils (if not already sent there) to light the kitchen fire and have things in train for plenty of hot tea. A responsible member of the family, who knows the rooms and the furniture, must also go over before the arrival of the vans, to look round things, but chiefly that, when the first one is unloaded, he or she may be able to tell the men at once to take each article to its particular room. Reception-rooms are simply named, but bedrooms must be specified as “first floor back,” or whatever it may be. Children out of the nursery may be very useful, and save much time in carrying in smaller articles; and generally regard this, and the *al fresco* character of meals that day, as fine fun. It was always a petition with ours to stop home from school as a treat the day of a removal; and they generally found plenty to do, and were seldom in the way. The main thing, however, is, that under the direction of the responsible person (who must not be susceptible to draughts, as he or she will be chiefly about in the hall or on the staircase) every principal article of furniture be carried at once to at least its own room, and nowhere else; it may in many cases be actually put down in its proper place as well. The reason why unpacking is so much more quickly done, is that in packing

some consideration has to be given, whilst in unpacking not a moment is lost in that way, but every article as it comes to hand has simply to be carried to a place known beforehand. As all the family arrive, if they are willing to help, it is wonderful how quickly the things get taken out and carried in, especially with a good brew of hot tea to keep the workers up to the mark.

There should seldom be an attempt to get up pictures and things of that sort the same day, though in some cases it may be possible to have them taken round in a small van and put up previously. Any such forward work, and especially in gas-fittings, greatly adds to the comfort of the next few days, but, on the other hand, dismantles the old house earlier in proportion. There is also the difficulty of getting possession in many cases. If curtains and blinds can be got up by a neighbouring carpenter, or any of the grown-up members of the family, in the principal bedrooms, it will have most to do with the comfort of the first night.

One thing should always be attended to: all the bedsteads and bedding in use should be so packed as to come early to hand; and, if possible, the servants or other members of the family (and *all* healthy members should take hold in a removal, if the necessary discomfort is to be shortened) should see at once to getting the bedsteads erected, so that the workmen may not be hindered from clearing the vans. If the weather makes airing of the bedding necessary, that also should be put in hand at once. Every effort and arrangement should be made to get every bed that is to be slept in *made early in the evening*. That is the chief secret about getting to bed in good time and in comfort. When that is done, and strips of carpet ready to lay down temporarily at the sides, repose is safe; for people at least, and at the worst, *can* go to bed as soon as the vans are dismissed and the door is shut. But if this is not seen to, people are apt to go on with odd jobs unthinkingly till they are tired, and then find there is yet hard and tiring work to be done before they can lie down.

Of course all this may be left to the workmen. Where money is no object, and the sum paid and position of the customer ensure plenty of men, that is quite a proper thing to do. But in the case of average families, though the men are supposed also to do all this work, if the removal is to be got over rapidly, far the best, if not the only way is for the able members of the household to take hold also, and render what assistance they can. The men themselves work faster and better for it, and have not the opportunities for shirking which occur if they are left to themselves.

The next two or three days after a removal are

comfortless ones; and especially is it wonderful how *cold* a house feels until all the carpets are down, particularly on stairs and passages. There are curtains and blinds to be got up and fitted everywhere; pictures to be "placed," and then hung; overmantels to fix, furniture to arrange, kitchen things to get in order, &c. But the end of that time ought to see things nearly straight. It is best to devote the first day to getting the kitchen and reception-rooms in order, and the most pressing matters only in the bedrooms. Reception-rooms are like one's clothes; till they are presentable no mistress can feel easy and comfortable. It takes very little time, as a rule, to arrange the furniture; and then if the pictures and curtains can be got up, and the dust is taken up which the workmen have brought up on the carpet, things will begin to look comfortable. The most hopeless and wearisome plan of all is to have to fit a carpet after the furniture is brought in. This may keep rooms in a muddle for a week or more, and should be most carefully avoided. It will be weeks before all little odds-and-ends and personal belongings find their places again; but such do not matter much to comfort. As soon as people have their living-rooms comfortable and orderly, can have their meals as usual, and sleep surrounded by all their usual conveniences, the discomforts of a removal are practically over.

Last Items.—The very last things to be put down in a new house are the stair-carpets and matting or floor-cloths, or, possibly, carpeting for the hall. Every day's traffic does something towards taking off the bloom and destroying the fabric, and consequently all the rest of the house ought to be in order and clean before they are put down. The sound of tramping up and down bare stairs and passages is unpleasant, not to say distracting, and all the greater is the reason for getting all operations concluded, so that the last touches may be given, and peace and quiet may reign in the household.

Continental Removals.—These are wearisome, exasperating, and expensive operations, and woe betide the unhappy mortal who undertakes managing one by him or herself! The result will be a miserable feeling of being fleeced and taken advantage of on all sides, and compelled to pay an amount of money that is terrible to contemplate. A firm that makes removals its speciality is aware of all these pitfalls, and though the rate of payment may be somewhat high from house to house, and somewhat lower from the house in Great Britain to the foreign *entrepôt*, it is a saving in the end to go in for the first arrangement, though persons who have to remove all

their goods and chattels are to be pitied, unless money is plentiful with them. The modes of life are, however, so different in England and on the Continent, that it is seldom desirable to take all, or anything like all, the household requisites. A selection may be wisely made, and other items left to be bought on the spot.

Taking Furniture Abroad.—Furniture is often bought for transmission to America or to our colonies, but unless the purchaser is himself a shipper and knows all about his business, it is best that the house from which the goods are bought should make all arrangements for delivering them on “the other

side”—at all events, at the seaport from whence they may have to travel by slow *treks* or stages “up country.”

Emigration.—Though the number of persons emigrating who care to carry furniture with them is sure to be few, yet there are some who, with every desire to purchase bedsteads, bedding, &c., in the land they are going to, consider it wise and economical to take over a feather bed if they are addicted to it, and feather pillows. If so, they must be packed in the lightest possible cases; and if wicker trunks are ever desirable for ocean passages, it is when they will only be packed with such items as these and eider-down quilts.

THE HOUSEHOLD TOOL-CHEST.

It would be obviously impossible and out of place in a work of this kind to introduce an exhaustive treatise on carpentry and its allied trades, and we must refer those of our readers who intend to go in for mechanics, either as a considerable hobby or with the object of mastering its principles, to numerous books and manuals for the more complete teaching of such subjects. We shall confine our remarks to those miscellaneous jobs about a house which are well within the capability of the average householder, whose comforts will be materially increased, at the same time that his yearly expenses will be diminished, if he learns to do for himself small mechanical operations which cost sums out of all proportion to their value *per se*.

The average tool-box, with its accompanying varied ill assortment of screws (rusty), nails (mostly bent), with a thousand and one odds-and-ends mixed up in heterogeneous confusion, is too common to need any comment beyond the injunction to toss the whole affair into the dust-bin, and so get rid for ever of a source of annoyance, discredit, and loss of time. The following tools should be obtained as a commencement, and can be added to as occasion or opportunity offers; and while we are about it, let us have each good of its kind, and, once put in order, let us get well into our mind the fact that it costs less time to keep tools sharp and in good order than we waste by attempting work with imperfect instruments. Now for our tools. One strong heavy hammer for larger work, and a lighter one with a long nose for driving and a claw for removing nails; a wooden mallet, useful for mortising, and also for the distinctly domestic function of tapping beer-barrels; and a long sash-saw with medium teeth and good amount of “set,” so as to clear well in sawing up logs not too dry. A strong-backed tenon-saw,

which must not be allowed to do duty as a meat-saw on the greatest compulsion. A jack-plane, and a smaller one for smoothing (iron sole preferred). A wide chisel (1 inch), and a narrow one (say, $\frac{1}{2}$ inch). These are known as “firmer” chisels, and must be handled in hard wood. One or two mortise-chisels, $\frac{1}{2}$ inch and $\frac{3}{4}$ inch. A good strong screwdriver (the longer it is, the more purchase it gives), and a small handy tool for little screws. (And here let it be enjoined that these last two are the proper tools for taking out tacks, and not the chisels aforesaid. Shame that such an injunction should be necessary! but it is, as the notches in the ordinary household chisel will testify.) Two or three gimlets and brad-awls, different sizes. A pair of pincers; ditto pliers, with a cutting edge one side. A square (six-inch), two-foot rule, marking-gauge, oilstone and can (these last two must on no account be omitted); a punch; glue-pot and brush; and a brace with an assortment of bits.

The above are sure to be wanted continually, but for higher flights of mechanics, even in the house, the following may often be desirable:—Gouges, compasses (either with spring-back or wing); bevel, files and rasps, keyhole-saw in pad, vice, mortise-gauge, blow-pipe, and last, but by no means least, a grindstone. A very serviceable stone may be purchased for 4s. or 5s., and it will be by no means a bad introduction to mechanical pursuits to fit it up on a frame to work either by crank or treadle; by all means the latter if you can accomplish it, as then you can grind your chisels and planes without a second person to do the turning. The stone itself should be sufficient fly-wheel, and if indoors will need a trough beneath to catch the water necessary during the grinding operations. This trough, however, must not be so fixed that the stone runs in the

water, otherwise that portion immersed when the stone is at rest will become soft, and wear away unequally.

Now these tools will need to be kept where they can be found when wanted, while they are preserved from loss and exposure: hence a proper tool-box, with compartments for nails and screws in separate divisions, should be provided; or, better still, a small room or dry light shed should be set apart as a workshop; and this latter plan will admit of a more or less efficient bench and a few shelves, whereon to store in due order the many odds-and-ends sure soon to accumulate. The old motto, "A place for everything, and everything in its place," is the essence of the efficiency of our workshop, and before attempting any important jobs we must first have our little room in order.

The Use of Tools may well occupy a few lines of this preliminary chapter, because a reasonably good understanding of the principles governing the proper application of each will materially help us forward in our work. For convenience' sake they may as well be examined in the order above enumerated.

Hammers.—The heads of three representative forms are figured here, and sufficiently explain their purposes. For a general all-round household hammer the first will serve, and is the sort useful in



Fig. 1.



Fig. 2.



Fig. 3.

the garden for nailing trees. The second (Fig. 2) is a useful form for tacking operations, the small end or tang being intended to administer a tap to settle the nail into its place before final knocking home. Its use will save many a damage to the finger and thumb. The third form (Fig. 3) will not often be found in a household tool-box, but is useful nevertheless for heavier work; and its pane, the end opposite the striking-face, may even be turned to account on occasion for the purely household function of breaking up the big lumps of coal.

There are two distinct kinds of mallet. The square mallet has a somewhat formidable head of hard wood, usually beech; the handle should be fitted by being threaded through a hole in the head, handle first, in such manner that the centrifugal tendency

of the heavy part is to wedge it on firmer; for if such a lump did fly off, under a too energetic use, it might occasion serious damage to friend or surroundings. This is the mallet for carpentry purely, and should be held in the hand with an elastic swinging movement, as contrasted with a dull dumping thud, which is liable to communicate a very unpleasant jar to the wrist.

The lighter cylindrical-headed mallet is quite unsuitable to any serious work, and must be kept for the purely domestic functions, such as tapping barrels.

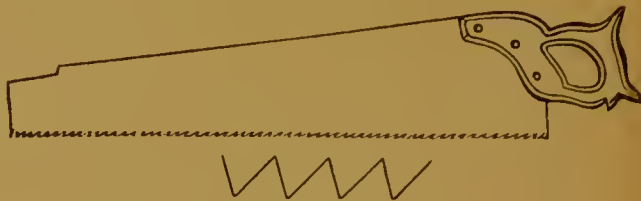


Fig. 4.—HALF-RIP SAW

Saws should be roughly considered in two divisions—ripping-saws, for sawing with the grain of the wood; and cross-cut, for sawing across it. A handy rip-saw should be just long enough to use the easy sweep of the hand up and down, and the teeth should be of medium size, and not too acute an angle. Probably the form known as "half-rip" (Fig. 4) will be the most convenient for general use. The "set" of this saw needs to be considerable, and is obtained by the hammering of each tooth to an angle with the flat of the blade alternately one side and then the other—the obvious end being that the space cut by the toothed edge should be rather thicker than that required by the blade following in the cut, and so that a clearance should be afforded for the sawdust in process of removal. Saws are sharpened with a triangular (known as three-square) file, and should be securely held in a vice with a wooden strip on either side of the saw. At best the operation is a nerve-disturbing one, and should only be attempted when far away from sensitive ears. The setting is done in common amateur practice with a little wrench with suitable slots in its edge to pull over the teeth: but our advice is that you send your saw to a skilled setter once now and again, when it is very bad, and so start fair for a new lease of usefulness. A smaller form of rip-saw, either the sash or panel variety, is in principle the same as described above, but smaller in size, tooth, and set. All these forms are used nearly perpendicularly, the work being laid on a convenient sawing-stool, and held by the knee.

Saws for cross-cutting are, on the contrary, used horizontally, and must not be dug too hard into their work, but allowed to quietly cut their way with a smooth even pressure both forwards and backwards.

The practice of using this saw either downwards or even diagonally is fatal to both saw and work.

As will be seen by Fig. 5, a tenon-saw is a thin steel blade firmly held in a stiff steel or brass back, so as to keep it rigid; and on examination the teeth will be found to have much less rake or angle than the rip-saw, while the set is only just enough to clear easily. The dovetail-saw is simply a smaller

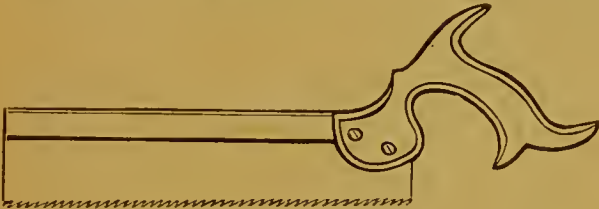


Fig. 5.—TENON-SAW.

edition of the tenon-saw, the blade being very thin, with very fine teeth and practically no set at all. This is used for cutting the very fine lines for fitting together the dovetails of the cabinet-maker.

There is a certain amount of "knack" required in sawing straight, that can only be acquired by patient care; but the painful efforts we have often seen in the tyro doing his best to follow his line, generally arise from his overdoing it and forcing his tool. This is worse than useless. If a line is carefully begun, no difficulty ought to be experienced if the saw is allowed to do its own work, cutting its way properly, without undue force or strain. Once let a saw jam in its cut, and you may be sure something is wrong either with the tool or its driver—probably the latter.

The keyhole-saw is a narrow blade tapering to nearly a point, and is thick at the tooth side and



Fig. 6.—KEYHOLE-SAW.

thin, almost a knife-edge, at the back. This wedge section is to enable it to be turned in small curves, as suggested by its name. The blade A is generally secured by screws, c, in a hollow handle, B, into which the saw can be nearly pushed when not in use, as shown by the dotted lines. A modification of this saw is a parallel blade held in tight suspension in a frame so contrived as to be useable in any curve and direction within the limit of its radius. This is called a turning-saw (Fig. 7). The blade A is supported by the two ends of the arms c c. These arms are kept apart by a stretcher D, which allows the arms to play on its ends c c. The other ends of the arms are connected by a spliced lacing E of strong cord or gut, which can be strained tightly by twisting round the twister F, kept from untwisting

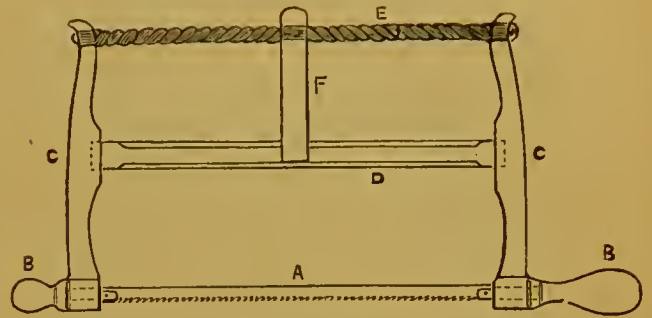


Fig. 7.—TURNING-SAW.

by bearing against the stretcher D. Thus the pull together by E keeps the blade A in tension; but, if necessary, when E becomes too slack, the blade can also be tightened by screwing up the handles B B. A close relation to this is the fret-saw (Fig. 8), but here

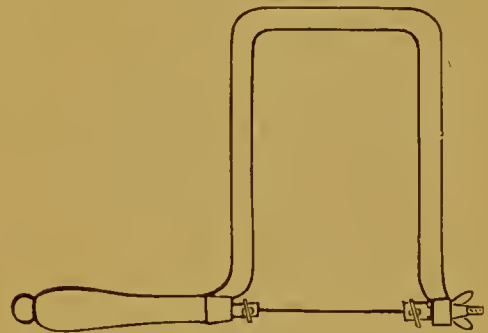


Fig. 8.—FRET-SAW.

the back is usually steel and of a very much greater scope. The blade of this variety is very tiny, and can be readily turned round in a hole made by a small bradawl. It is tensioned by screwing up and the spring of the steel frame.

Planes.—The plane most in use is called a jack-plane, and is about 18 inches long, with a blade of, say, 3 inches (Fig. 9). The body is usually of beech-wood, and a bevelled hole is cut in this about one-third from the front end to admit a double plane-iron, the cutting portion of which is a steel plate, B, resting on the inclined edge of the said slot in such a manner as to make with its edge and the surface to be planed an angle of about 45°. Above this lower blade is

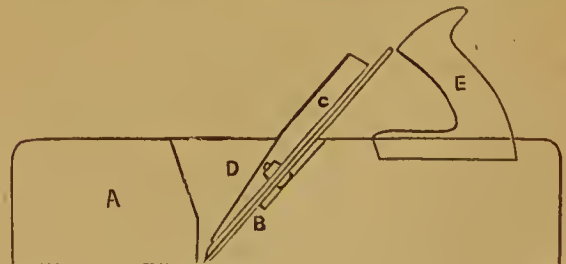


Fig. 9.—JACK-PLANE.

another, called the "break-iron," adjustable by means of a slot and screw, so that its edge may be fixed at the best position to throw off the shaving cut off by the lower iron. In Fig. 10, *a* is the lower or cutting blade, *b* the break-iron, and *c* the adjusting screw.

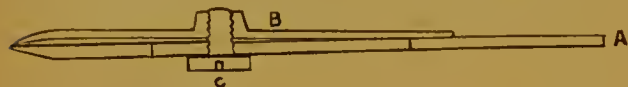


Fig. 10.—PLANE-IRONS.

These two steel plates are kept in position by a wedge *c* (Fig. 9), fitting a proper channel on each side of the plane-slot. The lower iron being properly ground and set on an oilstone, the break should be carefully adjusted to bring its edge about $\frac{1}{16}$ -inch from the edge of the cutting-blade, and the whole iron inserted into its groove in the plane, and the wedge gently tapped in. A few strokes will soon determine if it is properly set; and if not far enough out, a tap on the top of the iron will make it so; or if too far, a tap on the fore part of the plane will jar it back. Be specially careful to see that the cutting edge is truly square across the sole of the plane, or else you will find the blade digging into the wood one side, while the other is not cutting at all. A drop of oil on the sole in front of the blade occasionally will ease matters a little.

We have gone somewhat minutely into description of the jack-plane, because it is typical of the whole tribe, and the method of treatment is similar in all. The trying or "try" plane is merely an elongated jack, and is intended for truing up edges of boards for joints, or other work needing great accuracy. It must be kept very sharp, set to cut a very thin shaving, and must on no account be used for roughing-out, or its special usefulness will soon be gone. It is often now made of iron for fine cabinet-work. The smoothing-plane is a short tool, and is used for small objects, and, as its name suggests, for smoothing rather than attaining any great accuracy. A great many forms are now sold, some with iron or brass soles, and fitted with minute screw adjustments to facilitate accurate setting. For these some degree of education and a good deal of care are necessary, as they are tools of delicacy and precision.

Among the planes are found the plough, a tool admitting of interchangeable blades of different widths, with moveable gauges for both position and depths of the grooves to be cut, as for tonguing boards together; also the rebate and fillister planes, matching and beading, rounding and moulding planes—each for a special purpose, but of which our space only admits of passing mention.

Chisels.—A common chisel (Fig. 11) is a flat

blade of steel bevelled from one side to the other at an angle of about 30°. It is driven into a wooden handle up to the shoulder. In principle all chisels are wedges, and it should be borne in mind that, as such, they tend to split and tear up the fibre of wood when the shaving cut is too thick to bend to the pressure of the edge of the tool. Paring chisels are much thinner and wider than ordinary ones, and are used for clearing out deep holes, such as mortises.



Fig. 11.—"FIRMER" CHISEL.

Mortise-Chisels (Fig. 12) are much stronger and thicker, and are sharpened in the same way, but

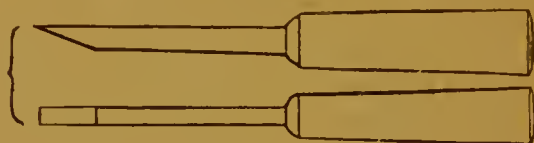


Fig. 12.—MORTISE-CHISEL.

with an angle rather less acute. Gouges are only curved chisels, and are used in the same manner. Chisels are used either by the pressure of the hand, or by blows of a mallet, the flat side being always kept in the intended path of the blade, which path it regulates and guides. The only exception is when a surface has to be chopped down, as it were, by chisel and mallet; then the bevel is held downwards on the work, the chisel being held slanting, with the left hand pointing to the left, and struck with the mallet from right to left. Holding the chisel this way keeps the blade from being driven into the wood.

The above diagrams show the chisel-blades seen on the edge and from the back.

In sharpening chisels they should be ground on the stone slightly more acute than their finished edge is intended to be; this is in order to reduce the surface which will have to be perfected or polished upon the oilstone. In all cases after sharpening, it will be found that there is a slight burred or wire edge upon the extreme end of the flat side of the blade, which must be removed by rubbing on the stone, taking care to keep the blade down perfectly flat on the stone, or a second bevel will be produced, thereby increasing the angle of the edge, and destroying the keenness of the tool. In sharpening on the oilstone, the tool must be firmly held by both hands, and rubbed backwards and forwards, always being traversed in a parallel path, as any approach to a rocking motion would produce a thick rounded edge.

Gouges are sharpened in the same way, of course receiving a rolling motion to bring all parts of their edge into contact with the stone. This motion requires some little practice. The wire edge on the inside of the gouge is removed by rubbing a small round slip of oilstone against it; but in this case the chisel is fixed and the stone moved.

In large workshops stones are kept having hollow grooves in their surfaces, in which the round gouge-blades are rubbed. Both chisels and gouges are made of various widths and strength; but three or four of each will be found sufficient.

Gimlets and Bradawls need little description, because no one at all interested in carpentry can fail to know all there is to know about them. In choosing gimlets, get those with a spiral flute rather than the old-fashioned ones with a flat groove straight up the shank, because the former kind clears out its chips better. Bradawls must be kept *sharp*, just like chisels; and on entering first into the wood of a particular piece of joinery, the edge should *cross* the direction of the grain. If started with the grain, the tool acts as a wedge, and may easily split the wood if it is thin, or the hole is near the edge.

Pincers and Pliers.—These tools are tolerably well known. Fig. 13 is the ordinary pair of pincers, useful for drawing nails or any similar purpose, or for firmly holding any small object. The edges are very slightly bevelled away from each other, so that only the edge quite meets when closed; this is in order to be able to seize a very small projection, as the head of a nail, which can then be drawn out by bearing over the pincers on one of the rounded jaws. There is often a nail-claw in one of the handles. A common pair of pliers is shown at Fig. 14, and is much more convenient for holding very small articles, or bits of wire or sheet metal for filing up, but has, of course, less power than the pincers. Pliers are made of many varieties of form, but the most useful variations are three in number. The first is the *round-nosed* pair of pliers, in which the two jaws are cylindrical, for bending wires into small hoops or circles. The second is a pair of *gas-pliers*, which are most useful in houses where there is gas. Each pair of jaws has two semicircular recesses on its inner face, fluted or corrugated on the inside, so as to grip firmly without slipping brass pipes of considerable variation in size, while at the tip are pincer-jaws, generally with a little groove in the centre of each, so as to grip a piece of wire more firmly. The most handy domestic size for gas-pliers is the smallest, whose smallest recesses grasp the usual size of burners for unscrewing and replacing, while the larger ones embrace the usual sizes of brass pipe. Finally

there are the *cutting-pliers*, one form of which is shown in Fig. 15. These resemble pincers, but with the edges more acute, sharp, and of carefully tempered hard steel, for cutting wire. A good pair



Fig. 13.



Fig. 14.



Fig. 15.

will cut even steel wire without flinching. Some are made with the cutting edges on the side of the jaws, and in that case the ends of the jaws are often fashioned into a pair of holding-pliers.

In choosing a **Two-foot Rule**, better have one folding in four, reducing the length to six inches. It should be of hard wood with double joints, and it is not advisable to have it divided to less than sixteenths, or even eighths; less than the smaller is confusing and seldom if ever wanted. See that when opened out the joints are true, and admit of the tool being relied on as a straight-edge. Many amateurs think they can do without marking-gauges, and there they make a great mistake. One-half of the success of a job, and certainly also much of its pleasure, arises from its having been carefully planned beforehand, and accurately set out from the plan. Rule, square, and gauge, therefore, are the beginning of everything, and must not be overlooked in furnishing a tool-box.

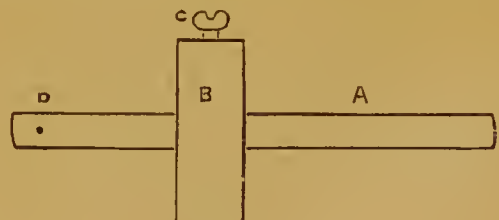


Fig. 16.—GAUGE.

Fig. 16 shows a common marking-gauge, in which the rod A slides backwards and forwards in the block B, but is capable of being fixed at any required place by the screw C; near one end is a hole through which the steel point D is driven. In using this tool the right end is grasped by the right hand, the thumb

and forefinger of which take hold round the block. In gauging a piece of wood, one edge, previously planed, is used as a guide, the left of the block being kept close up to it, the point of course marking a line parallel to the edge of the wood at any required distance from it. In cutting thin parallel laths, a knife is used instead of the point *D*; this is called a

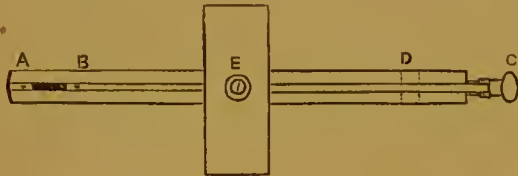


Fig. 17.—MORTISE-GAUGE.

cutting-gauge. Fig. 17 shows a mortise-gauge, which is used for marking two parallel lines at once, as in marking mortises and tenons. The point *A* is fixed, but a second point, *B*, is fixed on the piece of brass sliding in a groove in the rod, which slide is moved by the screw *C*. The screw *C* works in a box or nut shown by the dotted lines at *D*. The method of using is the same as with common gauges. The rod is fixed by the screw *E*.

A Carpenter's Bench.—This is not an absolute necessity. Many useful little repairs can be done without any bench at all, or anything in the shape of one. But it is difficult to *make* even the simplest thing without a bench of some sort, because even a simple board to be planed requires to be laid upon something of the kind before work can be done upon it. True, for such a simple job as this a fairly solid shelf may be made to suffice; or a pretty massive kitchen-table would do very well, if a piece of wood, or a screw, or even a nail, can be fastened into it with a projecting head to serve as a stop for the wood. But either of these then *becomes* a bench for the time being; and when it came to planing up the edges and ends of the board, some proper fixing would be necessary. It is therefore very desirable to have or to make even a small carpenter's bench, if room can possibly be found for one, as of course will be the case if any room, or out-house, or attic be set apart as a workshop.

Failing this, we have known a *folding* bench fitted up even in a passage, to be folded back against the wall when not in use. It cannot be so firm as a solid bench, since at the back it must be supported on hinges instead of legs; but even such an accommodation will be found a useful help if no other is possible. To construct such a bench, an inch board the length of the bench must be *firmly* fixed flat against the wall, horizontally, the centre of the board being the intended height of the bench. To

the centre of this board the bench must be hinged by three or four strong hinges, so as to fold *up* against the wall when not wanted. Two inches thick, or two inch boards screwed together, will suffice for such a bench as this. And to the other or outer edge of the bench the two *front* legs only of the bench shown in Fig. 18, with the side-piece *A*, are also hinged, so as to still hang *downwards* when the bench part is lifted back *upwards*. Thus all will hang back against the wall when out of use, and can be kept from falling by a simple catch of any sort.

The ordinary bench is a very simple affair, such as can be readily made for himself by anyone with the least knowledge of tools. Practically it is neither more nor less than a plain but massive table, with four legs stronger than usual, as shown in Fig. 18—the legs, and the framing under the table itself, being firmly screwed and mortised together. There are only two points in which it differs from a substantial plain kitchen-table. The first is, that the top or table itself should not be less than two inches thick, three inches being still better if much mortising or other mallet-work is to be done. Hard wood is also better than deal. Still, in case of need a very good bench can be made by gluing and well screwing two inch planks together. It should be from half a yard to a yard wide, according to means and space. The other difference is a thick strong inch plank all along the front, well screwed to the edge of the top, and shown at *A* in the figure. This both strengthens the bench a great deal against blows of the mallet, and is

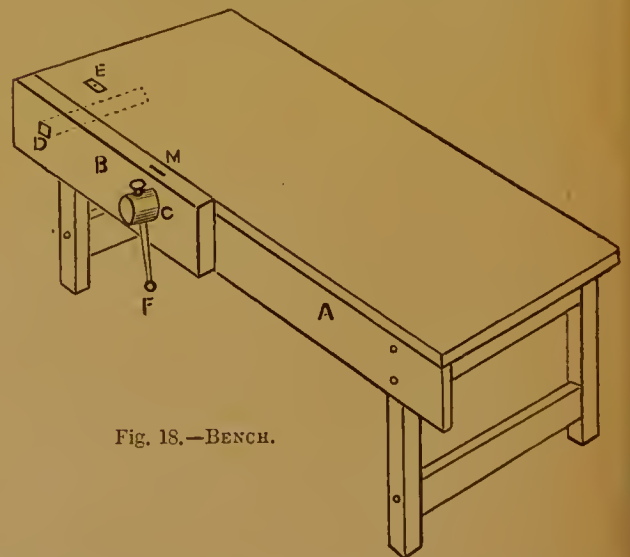


Fig. 18.—BENCH.

needed to support boards which are being planed on their edges. This plank is generally bored with a number of holes, into which pegs can be driven to support the lower edge of a board which is being worked, especially at the tail end.

At the head of the bench is the bench-vice, consisting of another piece of stout plank, *B*, which can be screwed in and out by the wooden screw *C*, turned by the loose lever *F*. A piece of wood, *M*, fixed in *B*, fits into a groove turned round the neck of the screw, causing *B* to move with the latter as it is screwed in or out; the screw-box is, of course, fixed behind plank *A*. In the figure is shown a simple slide, *D*, at the other end of *B*, to keep it in place, but very often there is instead another screw similar to *C*. The use of this vice in holding boards with the edge upwards is self-evident.

At *E* must be inserted some kind of bench-stop, as it is called; that is, something against which the end of a board can abut whilst being planed on its side, to keep it from being moved along with the plane; also to resist chisel-work. For rough work a square pin or post of hard wood is often used, an inch and a half square, tipped with steel filed into projecting teeth on the side towards the work; this is knocked up or down with a mallet as required. This generally makes it work loose, however, and the whole is far too clumsy to hold a thin piece of work—say, $\frac{1}{8}$ inch thick—without risk to the plane. Fig. 19 shows a bench-stop which can be adjusted to any thickness. The base-plate, *B*, of this stop is

carefully let into the top of the bench *A*, and screwed down by the screws *H* and *I*. At one end of this plate, at *D*, is hinged the top plate *C*, which can be

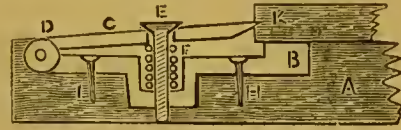


Fig. 19.—BENCH-STOP.

screwed down by the screw *E* so as to lie level with the bench; but when *E* is unscrewed a little, a coiled spring raises *C*, as shown, as far as the screw will allow. The rising plate *C* is bevelled underneath to a sharp edge at its top surface, which is cut into teeth, and holds the work *K*. This stop costs about half-a-crown, and there are other kinds. For a special thin job, if there is no adjustable stop of this kind, a couple of flat-headed screws may be screwed into the bench, filed smooth on their tops, and further screwed down till they project no more than is required, the work resting against their bevelled edges.

We have now described in detail the more commonly required tools, and may proceed in the next chapter to exercise our knowledge on a job in real earnest.

THE SYMPTOMS OF DISEASE.

WHEN a disease affects any part of the body, it gives rise to certain indications of its presence which are called "symptoms." A disease may have many symptoms, some of which are "characteristic" or peculiar to it, whilst others are common to many complaints. It is of importance in the diagnosis or discrimination of a disease to bear in mind that the symptoms are not the morbid or unhealthy condition itself, but simply indications of its presence. For example, "cough" is not a disease, but simply a symptom common to various diseases, such as consumption, bronchitis, pleurisy, pneumonia, and many others. It is of frequent occurrence in disease of the lungs; but it may be due to other causes, such as an elongated uvula, a relaxed sore throat, the pressure of an aneurism, or even an attack of indigestion. Again, "spitting of blood" is common not only to consumption, but to many other affections of the chest; and it may happen that the blood comes, not from the chest at all, but from the throat or gullet, or even the stomach. "Jaundice" is often spoken of as a disease, but it may be due to a variety of causes, such as catarrh of the bile-duct, cancer of the liver, and other complaints. It will

usually be found that the patient presents other indications of a departure from the normal condition of health, such as vomiting, constipation, disinclination for food, lassitude, debility, and possibly a progressive loss of flesh.

It is customary to distinguish between "subjective symptoms" and "objective symptoms." A subjective symptom is one which the patient feels or experiences, but which is not obvious to others; whilst an objective symptom is one which is patent to other people. If, for example, a man says he has a pain in the back, that is a subjective symptom, for no one but himself can detect its existence, although its effects may be apparent. When a man is jaundiced, that is an objective symptom, for everyone can see it by looking at him in the daylight. A subjective symptom is of less value in the diagnosis of disease than an objective symptom; for the patient may be fanciful, and may describe his sufferings in exaggerated language: or, possibly (as in the case of prisoners who wish to be placed on the sick-list), with the express purpose of deceiving the doctor.

It is quite usual, also, to distinguish between

"symptoms" and "signs"—or "physical signs," as they are often called. A patient may complain of loss of power in one hand, or a feeling of numbness, and this we regard simply as a symptom; but if we can demonstrate experimentally that the muscles of one arm respond less readily to the action of an electrical current, we speak of this as a "physical sign." The existence of consumption is usually detected by the physical signs, such as inequality of movement on the two sides of the chest, a difference in the "percussion note" obtained when the chest is struck by the fingers or an instrument, or a difference in the breath-sounds when we listen with a "stethoscope" or other similar apparatus. Physical signs are of especial value to the physician, because they can be accurately recorded and compared from time to time, so as to afford an indication of the progress of the disease either for better or worse.

In some cases the "signs" are so slight or so ill-defined that it is difficult or impossible to arrive at an accurate diagnosis, and then, perforce, we have to be content with treating the symptoms. Sometimes it happens that the *disease* is incurable, but much relief may be afforded by checking the *symptoms*. A man may be dying of consumption, the loss of lung-substance being so extensive and so rapid that it is beyond our power to arrest it; yet the patient may be greatly benefited by checking an attack of diarrhoea, or the distressing sweating from which he suffers at night. Homeopathy is, as a rule, directed to the cure of symptoms; and as its principles are easy of application, it is a favourite method of treatment with many for trivial affections, and especially with those who have not the skill or experience to make what is called an "exhaustive diagnosis."

Some symptoms are pretty characteristic of certain diseases, or of certain groups of diseases; and as it is well to have some idea of these, it is convenient to discuss the value of such symptoms from this point of view, with the object of obtaining an approximate idea of what ails the sufferer. In the following list this method of investigation has been adopted, and most of the common symptoms are passed in review.

Shivering.—A "rigor," as an attack of shivering is called in technical language, marks the onset of many fevers. The shivering affects the whole body, the tremulous movements not infrequently causing chattering of the teeth. The face wears an expression of great discomfort or even distress. The complexion, and especially the lips and nails, is livid and blue. The skin is dry, and may present that peculiar condition known as goose-skin. The breathing is quick and shallow, and the pulse is small and

frequent. The temperature, as tested by the thermometer, is elevated, although the patient may complain of feeling bitterly cold, and may be glad to crouch down in front of the fire. There may, in addition, be headache, nausea, vomiting, and pains in the limbs. Rigors occur at the commencement of the following diseases:—Ague, small-pox, scarlet fever, erysipelas, blood-poisoning, and inflammation of the lungs. They may also mark the commencement of the formation of matter in some internal organ. Shivering is not, as a rule, a prominent symptom in typhus fever, enteric or typhoid fever, pleurisy, or bronchitis. In children an attack of convulsions usually takes the place of the shivering. The occurrence of a severe attack of shivering is always an indication of something seriously wrong, and the doctor should be summoned without delay.

Hot Skin.—A hot skin is always a sign of elevation of the temperature—in other words, of the existence of fever. A hot dry skin gives an impression of pungent heat, which is not noticed when the skin is hot and moist. For example, in rheumatic fever the skin may be very hot, but as the patient is bathed in perspiration, it is hardly noticeable. The hot skin may be confined to some particular part of the body, as one joint, for example, and is then an indication of the existence of local inflammation. In rheumatic fever the knees, ankles, and wrists are often swollen and tender, and the skin over them may be excessively hot. In an attack of gout the heat of the skin may be confined to the big toe or to the particular joint or region affected. The skin over an abscess, near the surface, is hot, and there may be, in addition, pulsation, with excessive tenderness on pressure. A hot skin is met with in all the fevers, such as scarlet fever, measles, small-pox, typhoid fever, chicken-pox, and erysipelas, and is not infrequent in inflammation of the lungs, acute bronchitis, pleurisy, blood-poisoning, and other similar conditions.

Rash.—A rash may be due to a skin disease, or it may be the specific and characteristic rash of some fever.

The rash of scarlet fever appears on the second day of the illness, but in mild cases its appearance may be the first evident symptom of the disease. It consists of very small dots, in colour bright scarlet, most intense in the centre, and fading away towards the circumference. They are placed so close together that they actually touch, leaving no normal appearance between them. The rash disappears on pressure with the finger, but immediately reappears. It sometimes comes out all over the body at once, but is more commonly limited at first to certain situations,

such as the sides of the neck and the upper part of the chest. In exceptional cases the colour of the rash may be deep purplish and dusky, or, on the other hand, it may be pale and ill-developed. The eruption reaches its maximum on the third or fourth day of the illness, begins to fade about the fifth day, and lasts altogether from five to ten days. In addition to the scarlet fever rash, little watery heads called "miliaria" are constantly present, and result from the excessive sweating. In what is called malignant scarlet fever the rash is often abundant and of a bright red colour; but in the worst cases there is no rash at all, as the patient dies before it has time to develop.

In measles the rash appears usually on the fourth day of the illness, but it has been observed as early as the second day and as late as the sixth. The spots when first seen are minute, red in colour, and not elevated above the skin. They rapidly increase in size, and become elevated and more distinct. The rash of measles is more mottled, and of a less fiery red than in scarlet fever. The individual spots may coalesce, but this is less common than in scarlet fever. The eruption is first seen on the scalp, close to the forehead, and rapidly spreads to the rest of the face, then to the trunk, and finally to the extremities. It declines in the order of its invasion, each individual spot lasting not more than twenty-four hours. When the rash is disappearing, a reddish-coppery colouring persists, this mottled appearance being very characteristic of the disease. When the rash has been very abundant, it may be followed by a little desquamation or peeling, but this is never so distinct as it is in scarlet fever. Sometimes, owing to some internal inflammation—of the lungs, for example—the rash suddenly recedes, a circumstance usually considered to be of bad omen.

In German measles or roseola the spots bear a close resemblance to flea-bites, and are often of a scarlet or dusky hue. The affection is so slight that it need never give rise to anxiety.

The eruption of small-pox varies greatly in character in different cases. It usually begins on the forehead, face, and wrists, and extends to the hands, feet, and trunk. It has a peculiar and characteristic shotty feel. The spots are first filled with water, and later on with matter, and each individual spot is depressed or umbilicated in the centre. With the appearance of the rash the fever subsides. The great point to remember is that the rash of small-pox appears after forty-eight hours' illness, whilst that of measles is not seen until the patient has been ill for seventy-two hours. The character of the rash may be modified when the patient has been previously vaccinated.

In chicken-pox the rash appears during the first

twenty-four hours, and may come out on any part of the body. There may be from ten to fifteen spots the first day, and from a hundred to a hundred and fifty on the second. They are little watery blebs, and the patient has the appearance of having been scalded with a shower of boiling water. The spots gradually disappear, leaving a crop of little scabs.

The rash of enteric or typhoid fever makes its appearance from the seventh to the twelfth day of the illness, but it may be a few days later. It is very likely to escape recognition, and would probably not attract the attention of anyone who had not seen it before. The spots usually come out on the chest and abdomen, are rose-coloured, and about the size of a pin's head. Very often there are not more than half a dozen to be seen at a time; whilst, on the other hand, there may be nearly a hundred. They come out in successive crops, each spot lasting three days. They continue to appear until the temperature falls and the illness approaches its termination.

In typhus fever the rash consists of ill-defined dusky-red spots, which are not elevated above the surface, disappear on pressure, and individually are scarcely perceptible. The rash presents the colour and very much the appearance of measles, but the spots in typhus are smaller, less elevated, and are never arranged in circles or semicircles. Fortunately, typhus is now rarely seen.

There are various forms of rash which occasionally result from eating shell-fish, pork, and certain other articles of diet; but their nature is readily recognised, and they are not likely to be mistaken for anything more serious. The bites of gnats and various insects may cause a kind of nettle-rash; but this again, with the slightest care, cannot be mistaken for the rash of fever.

Some fevers, such as ague and diphtheria, have no skin symptom. The rash of syphilis comes out about the sixth week after the disease has been contracted, and looks something like measles. The history of its onset will sufficiently indicate its nature; and it is essential that a doctor should be consulted at once.

High Temperature.—Elevation of temperature and fever mean practically the same thing, the rise of temperature being one of the indications of the existence of a febrile condition. The presence of an abnormal temperature may in some cases be ascertained by the touch; but to be at all certain about it, it is absolutely necessary to employ the thermometer. A temperature is valueless unless taken by someone who has had experience in such matters. The natural temperature of the body is said to be 98.4° Fahr.—that is, about 98½ degrees on

the Fahrenheit scale ; but, in reality, it may be anything between 97 and 99 degrees. A temperature over 99° indicates fever, and, possibly, the onset of some acute illness. The range of elevation of temperature varies somewhat in different diseases.

In scarlet fever the temperature may be 104°, or even 105°, on the very first day. It rarely rises above 105°, and never during the whole course of the illness above 106°. When the eruption begins to fade, it usually falls suddenly.

In measles the temperature rarely rises above 103°; but it varies from day to day, and its range presents nothing characteristic of the complaint.

In small-pox the temperature during the stage of invasion rises rapidly to 104°, and later on it may run up to 106°, or even 107°.

In chicken-pox the temperature is usually about 101°; but in exceptional cases it may run up to 104°.

The temperature of typhoid fever is very characteristic, and a good idea of its usual course may be gathered from an inspection of the chart given with the article on that disease. (See *TYPHOID FEVER*.) It will be seen, (1) that during the first week the fever gradually and steadily increases in intensity; (2) that during the second week it is constant or stationary—that is to say, the successive morning and evening temperatures are almost identical; (3) that during the third week the fever remits—that is, the successive evening temperatures remain the same, but every morning the temperature is a little lower than it was at the same hour on the previous day; and (4) that during the fourth week there is a gradual fall in both morning and evening temperature, until at last the patient is feverish only in the evening. During the first week of the illness the temperature may rise to 104° Fahr., or even higher. In the third week the morning temperature may be from 4° to 6° lower than in the evening. The temperature affords valuable information in the diagnosis of typhoid fever. An illness is probably not typhoid fever if the temperature on the first three evenings, or even on two of them, is the same; if on two of the first three mornings the temperature is alike; or if the temperature on the first two days rises as high as 104°.

The lowest temperature recorded is 71½° Fahr.; the highest (in certain cases of injury to the spinal cord), 110° to 111°. The following classification of temperatures has been adopted:—

Below 97° Fahr., temperature of collapse.

97° to 98° Fahr., subnormal temperature.

98° to 98·5° Fahr., normal temperature.

98·5° to 100·5° Fahr., subfebrile temperature.

100·5° to 103° Fahr., febrile temperature of moderate degree.

103° to 106° Fahr., febrile temperature of high degree.

106° to 107·5° Fahr., hyperpyrexia.

These facts may be placed in another way:—

When the temperature reaches...	103°	the fever is moderately severe.
"	104°	" severe.
"	105°	" very severe.
"	106°	" dangerous.
"	107°	" usually fatal.

In an attack of ague the temperature often runs up to 107° or 108° Fahr.; but this is only during the hot stage, and it rapidly falls again.

Certain drugs, such as quinine in large doses, aconite, antipyrin, antifebrin, and salicylate of soda, reduce the temperature, and their influence may have to be taken into consideration.

Quick Pulse.—The pulse is of some value in recognising the existence of fever, but it is of far less importance than the temperature. The pulse may be taken over any artery in any part of the body; but, as a matter of convenience, it is generally felt at the wrist. The normal rate of the pulse when the patient is sitting still is in most people 75 beats in the minute. In infancy, however, it is higher, and the pulse may be from 120 to 130 in the minute. In fever the pulse is increased in frequency, there being, roughly speaking, a rise of ten beats in the minute for every degree of elevation of temperature. A temperature of 100° Fahr. brings a pulse of 75 up to 90 or 100. A frequent pulse-rate is not absolutely indicative of fever, as it may be quickened by excitement and other causes; and, on the other hand, a natural pulse-rate is not proof of the absence of fever. For example, in many fevers, especially typhoid, the pulse may be normal, or even below the normal, during the whole of the illness.

Convulsions.—A convulsion may, especially in the case of children, mark the onset of some acute disease, such as scarlet fever. Children, as a rule, have what is technically called "an unstable nervous system," and are readily convulsed. The convulsion may be due to teething, to improper feeding, or to worms. It is important to take the temperature, and this will throw light on the subject. If the temperature is elevated, it is pretty certain that the convulsion marks the onset of some fever; whilst if the temperature is normal, or only slightly elevated, it is probably due to some other disturbing cause. But an attack of convulsions often speedily proves fatal in the case of children, and a doctor should be consulted without delay. Pending his arrival, the child should be put to bed in a large airy room; and in case of any probable delay, a dose of bromide of potassium, dissolved in milk, may be given—from three to ten grains, according to the age of the child. In adults, convulsions are usually due to epilepsy or hysteria. For the treatment of these conditions, the articles on the subjects must be consulted.

Vomiting.—An attack of vomiting often marks the onset of some fever, or possibly, in the case of children, of an attack of tubercular meningitis. The temperature will show whether it is of serious importance or not. If the temperature ranges above 99° Fahr., the doctor must be sent for. Both in children and adults, vomiting is often due to indigestion, or to an injudicious admixture of various kinds of food. When the vomiting is persistent, and occurs after every meal, there may be reason for suspecting the existence of ulceration of the stomach—a condition which calls for a prolonged course of treatment. A remedy commonly employed for checking vomiting is bismuth, which is best administered in the form of bismuth tabloids, one or two being taken before each meal.

Diarrhœa.—Looseness of the bowels is a prominent symptom in typhoid fever, the motions being of a peculiar and characteristic yellow colour. In dysentery there is much straining and griping, and the stools are abominably offensive. In cholera the evacuations are almost continuous, and have the appearance of water in which rice has been boiled. Indigestion will often give rise to a sharp attack of diarrhœa; and in London and other large cities diarrhœa is very common, both in summer and autumn, as the result partly of the heat and partly of the custom of eating over-ripe fruit. In one or two cities the drinking-water contains a small percentage of purgative salts, which may produce an unexpected effect on strangers. Some people always suffer from a relaxed condition of the bowels when the air is moist and destitute of bracing properties. In an acute attack of diarrhœa not due to fever, a table-spoonful of brandy in a tumblerful of milk will be found useful; whilst a few drops of essence of camphor—three or four—given every ten minutes on a piece of sugar will usually check the complaint. When the diarrhœa is persistent, and attacks several members of the household, the condition of the drains, and especially of the water-supply, should be investigated.

Furred Tongue.—The condition of the tongue is often indicative of certain morbid conditions. For example, the “strawberry” tongue of scarlet fever is so characteristic as to enable an expert to recognise the existence of the disease. In typhoid fever the tongue becomes quite dry and assumes also a brownish colour. When it is white, thickish, and tolerably uniform and moist, it is generally an indication of fever; whilst a yellowish hue more frequently proceeds from disordered liver. A smooth, red, glossy tongue, either moist or dry, is not uncommon in chronic diseases.

Turbid Urine.—The urine in health is clear, watery, and of an amber colour, having a faint peculiar odour familiar to most people. Its specific gravity, as shown by the urinometer, ranges from 1,015 to 1,025. Its reaction is acid—that is to say, it turns blue litmus-paper red. The quantity passed in twenty-four hours is usually about 48 ounces, or nearly two pints and a half. In most fevers the urine is of high colour, and deposits abundantly on standing. The specific gravity is increased and the quantity is diminished. There is nothing peculiar in the condition of the urine which would enable anyone to say from its inspection or examination from what particular fever the patient was suffering.

In Bright’s disease the urine contains albumen. On being boiled in a test-tube, over a spirit lamp, it becomes cloudy, and perhaps almost solid, and the precipitate does not dissolve on the addition of nitric acid. On examining a drop of urine under the microscope, especially after it has been standing for some hours, it may be found to contain what are called “casts,” varying in character according to the stage of the disease.

In diabetes the urine is increased in quantity, the patient often passing several quarts in the course of twenty-four hours. There are two kinds of diabetes—in one, *diabetes mellitus*, the urine has a high specific gravity and contains sugar; whilst in the other it is pale in colour, has a very low specific gravity, and contains no sugar.

In cases of hysteria the patient after an attack passes large quantities of pale-coloured urine of low specific gravity, but this is a condition which is only temporary and soon subsides.

The deposit which forms in the urine after it is passed, especially in winter, is of no importance, and is simply due to the low temperature. On adding a little warm water the deposit clears up at once. Certain articles of food and some drugs impart a peculiar odour to the urine. The effect of eating asparagus is well known. A dose of turpentine will cause the urine to smell of violets, and the same effect is produced by pure terebene. Some people experience this phenomenon from remaining, for even a short time, in a room the floor of which has been cleaned with turpentine. Cubebs give a peculiar odour to the urine; whilst creasote, or tar, or carbolic acid, used either internally or as local applications, may cause the urine to become black. Santonin, rhubarb, senna, and logwood also colour the urine. An examination of the urine by one skilled in such examinations is of the greatest importance in cases of suspicion, but little information can be obtained simply by looking at it, or testing its reaction with test-paper.

Pallor.—Paleness of the face, hands, and skin may be due to a number of causes. When it comes on suddenly, it may indicate the onset of some acute affection, such as one of the fevers, or it may be due to sudden failure of the heart's action, such as occurs in fainting. It may be produced by anger or excitement, or the receipt of bad news. When the pallor is persistent, it indicates anemia, or poorness of the blood. This is very common in town-dwellers who are underfed, or who work in dimly lighted rooms, or take too little exercise. It may result from any chronic discharge, from an attack of bleeding, or anything which weakens the patient and lowers the general tone of the system. It is usually accompanied by debility, a disinclination for work either mental or physical, and shortness of breath, especially on exertion. This condition, when not dependent on the existence of organic disease, is readily cured by the administration of iron.

Pain is a symptom which accompanies many diseases. The acute pain in the back, associated with fever, is a characteristic symptom of the onset of small-pox. In rheumatic fever the pain is usually experienced in the middle-sized joints; whilst in gout it is frequently limited to the great toe or possibly to the wrist. The pain of lumbago and of sciatica is too well known to call for detailed description. The pain of neuralgia may be limited to the face, and usually follows the course of one of the nerves. In rickets there is a great deal of pain, and the child dislikes being moved, but it is not localised, and might be more accurately described as general tenderness. When an abscess or a boil is forming, the pain is localised, and is of a throbbing character. Hysterical and hypochondriacal patients almost always complain of pain, but their description is always of such an exaggerated character that it is difficult to judge of the real amount of suffering experienced. Many forms of pain can be relieved by such remedies as poultices and the local application of aconite, belladonna, and other liniments.

Debility or weakness is a very common complaint. It must be remembered that some people are naturally more robust than others. Many men work twelve or sixteen hours a day for the best part of their lives, and seem none the worse for it; whilst others, if called on for any unusual exertion, simply collapse and take to their beds. A nervous temperament has undoubtedly much to answer for in these cases. When the debility and weakness and disinclination for work comes on suddenly in a person previously healthy, it is a bad sign, and is usually an indication of the onset of some severe illness. When a person chronically suffers from debility, it may be

taken for granted that the conditions under which he lives are unsanitary, or, at all events, unfavourable. Not uncommonly it will be found on investigation that the drains are in an unsound condition, and that there is a gradual escape of sewer-gas into the house. It may happen that the individual does too little work, or, on the other hand, it may happen that he is overburdened with work and anxiety, and gets too little exercise or amusement. Want of attention to the rules which should regulate the taking of food may be at the bottom of the mischief. When the condition is a chronic one, it may often be cured by the judicious administration of cod-liver oil or of tonics, such as quinine, iron, or phosphorus. Systematic exercise in the open air should not be neglected, and should be regarded not only as a pleasure but as a duty.

Incapacity for Work.—A disease is often serious simply because it incapacitates the patient for work, but in other complaints the inability for work becomes of little moment in the face of graver dangers. In most fevers the patient finds very quickly that he cannot work, and takes to his bed almost at once; but there is a curious exception in the case of typhoid fever, the patient being sometimes able to get about, and even to follow his employment, if not very arduous, for quite a week after the appearance of the earliest symptoms. The fact of the patient going to bed willingly may possibly be an indication that the attack is likely to be a serious one, but, on the other hand, it is a good sign, as showing that the patient is likely to submit readily to treatment.

Loss of Appetite is common to almost all acute diseases. There is not only loss of appetite, but the power of digesting food is in abeyance, probably from deficient secretion of the gastric juice. This symptom is not characteristic of any particular fever, and it cannot even be said that it is more common in one fever than in another. As a means of distinguishing between various diseases, it is absolutely valueless. It is common not only to nearly all diseases which are acute, but also to many which run a chronic course. It is a frequent symptom of dyspepsia, derangement of the liver, and even general debility.

Depression of the Spirits is a common accompaniment of illness of all kinds. It is difficult to be bright and cheery when in pain or when suffering from feverishness. In some complaints the depression of spirits is the characteristic feature of the disease, and this is especially the case in the condition known as hypochondriasis. Affections of the

liver, attended with constipation, are very apt to cause depression of the spirits, and even a confined condition of the bowels alone may have this effect.

Palpitation.—Palpitation may be due to heart-disease, but it is much more likely to arise from flatulence or indigestion. In many people it is distinctly traceable to smoking. Possibly the quantity of tobacco smoked is not great, but the brand is unsuitable. It often happens that "light returns" may be smoked with impunity, whilst Cavendish, or honey-dew, or even bird's-eye will disagree. The form in which the tobacco is smoked may have something to do with it, for many men can smoke a pipe, whilst their circulatory system is speedily deranged by a cigar or cigarette. As a rule, palpitation is not a serious symptom, and it is certainly not always an indication of the existence of organic disease of the heart.

Headache occurs at the onset of most fevers, and is a usual concomitant of the feverish condition. In yellow fever it is often one of the earlier symptoms. It is common in typhoid fever, and is not infrequently the marked feature of tubercular meningitis. A very severe headache is not unusual in the early stage of both small-pox and typhus fever.

The following table of symptoms may be of use in recognising some of the simpler fevers:—

1. Pain in the back	indicates	small-pox or typhus fever.
2. Severe headache	"	small-pox or typhus fever.
3. Diarrhoea	"	typhoid fever.
4. Cold in the head	"	measles.
5. Sore throat	"	scarlet fever.

It must be remembered that these are only broad rules, to which there are many exceptions. It is also to be remembered that we are supposing other grounds for believing there is *some* one of the specific diseases. Headache alone, for instance, would mean no more than headache.

THE FORMATION OF A GARDEN.

Paths.—These most essential adjuncts to a garden should be arranged for and marked out at an early stage—if possible, even prior to the completion of the house. The width of the paths must, in all cases, be regulated so as to be in proportion to the size of the garden; narrow paths never look well where there is any considerable extent of space, and wide paths in a small garden absorb too much of the room. In all possible cases the width should be such as to allow of two persons walking abreast of each other with comfort, without encroaching on the grass verges. A path five feet wide will admit of this; but if space permits, add to this another six inches or more. It is always well to provide for a path of double width, or more if of any length, next to the house on the garden-front; this will permit of a promenade in weather unfavourable for longer walks. Such a path would form a terrace, and give a more imposing appearance to the house itself.

After the paths are finally decided upon, the soil covering the allotted space should be removed to a depth of at least nine inches, so as to provide space for the material to form the paths. During the building operations, there will be a quantity of waste material, which can be utilised to form a rough bottom. Failing a sufficient quantity of this, clinkers, cinders, or other coarse refuse may be used up, instead of being carted away. Should gravel be fortunately found close at hand, the coarser portion of this, after having been screened, can be used as a bottom, reserving the fine portion for the surface.

Prior, however, to any coarse material being laid down, it will be necessary to provide for the drainage of the paths; this can easily be done at this stage, and should not on any account be overlooked, if their good condition is to be made a desideratum. The drainage is a simple matter, and can be done readily by any handy labourer. For paths of average width, cast-iron gratings fitted in frames eight or nine inches square will be a good size; the smaller ones (six inches square) are too small, and generally too weakly made to bear the weight of a garden-roller passing over them at frequent intervals. The most convenient spots for the position of these gratings should be marked out; in straight paths it is only a matter of distance from one to another, making due allowance for whether the paths have a moderate or rapid fall, or whether they are level or thereabouts. If the fall be rapid, the gratings require to be used at more frequent intervals, to prevent the washing away of the gravel, and its consequent waste. In the case of curves or bends in the paths, it will be necessary to use more judgment, and to fix upon the spots where the most water is likely to congregate. Every corner, too, should be provided for, unless in such a position as to cause the water to take an opposite course. An excavation should be made at each spot fixed upon to a depth of six inches below the bottom of the paths, or fifteen inches below the original ground-line. These receptacles should be fourteen inches square, and then built up with ordinary bricks in cement or mortar, making due provision for an inlet from

another drain, and at all times an outlet to the next drain, for which arrangements should be made at the same time.

The pipes for the drainage should be ordinary land-drain pipes without sockets; these can be laid on the bottom of the path, close up to one another, when the latter is prepared to receive the rough material. These pipes should never be less than three inches in diameter (inside measurement), and four inches if a large volume of water has to be provided for. In the case only of close proximity to the roots of trees do we recommend pipes with sockets. These in such cases should be carefully and closely jointed with cement to prevent the ingress of roots. Instances have come under our own observation where drains have been completely blocked through this precaution not having been taken; notably so in the case of an ash-tree, whose roots had thus penetrated a drain to a distance of eight or nine feet, causing a thorough stoppage. In the event of the path being exactly level, and of good length, an endeavour should be made to obtain a slight fall, which will facilitate the passage of the water, and thus assist in keeping the drain clear, which is the main object.

We are fully aware that some writers advise that the drains should be laid deeper, but from experience we fail to see that there is anything really gained, compared with the method here advised. In the event of the pipes becoming choked, the advantage is decidedly in favour of the shallow drain if the pipes have to be removed for cleansing. To avoid this happening, it is best to go round the gratings at intervals, as occasion may require, and to examine each one to see if there is any sediment washed in, and deposited at the bottom of the space below. If this sediment be allowed to accumulate, the ultimate result must inevitably be the stoppage of the drains; and if this continues for any length of time, the small roots of trees will be sure to find out such a congenial spot in which to thrive.

At times it is neither practicable nor convenient to lay down a drain to take off the water from some parts of a garden to any distance. At such times we have found it a very good plan to dig out a fairly large hole, which will hold two or three barrow-loads of rubble loosely laid together; this will afford a place for the water to be temporarily deposited, and in due course absorbed gradually into the soil.

Tanks.—If the water-supply of the locality is expensive, or not abundant, provision should be made, by the building of tanks, to receive the water from the drains as previously advised to be laid down. It may at first involve additional cost, but will eventually be found to be a most serviceable source of supply for gardening purposes, bearing

favourable comparison with the charges of some of the water companies, if their supply has to be relied upon, besides having a distinct advantage in the properties of rain-water, which are well known to be favourable to plant-growth. When a tank or tanks have been provided, lifting power will be needful: for this a high-pressure pump will be the best medium in the event of its being necessary to lift the water into tanks above ground, or to a higher level. Improved patterns of such pumps are now made by many well-known manufacturers specially for garden purposes. If needful, hose may be connected with such pumps, for washing trees or watering any extent of ground, with a saving of manual labour. Well-constructed tanks, built with cement and then coated with the same material on the inside, will be found a great boon to the garden; and if the work be well done at first, no future outlay need be feared, occasional cleansing only being needful. In the case of a supply from the water companies, one's hand has to be always in one's pockets, besides being at their mercy with respect to any capricious increase in the rates.

Other Drainage.—Other parts of the garden besides the paths will in frequent cases require draining; in fact, in the majority of cases, such provision should be considered at the commencement. An experience of the locality will be the best guide in this matter. In some cases it would be a positive injury to the garden to lay down any drains other than those for the paths; notably so if gravel predominates on the spot, and that, too, not far below the surface; or again, if on the chalk formation, little provision need be made. Where, however, the soil is at all close or retentive, and thus impervious to moisture to a certain extent, drainage is most essential to dispose of the superabundance of water. In such cases the drains should be laid down, not at a great depth, but at from 2 ft. to 2 ft. 6 in. below the surface. In providing a drain on such soils at a greater depth, the main object will be defeated in proportion to the depth at which it is laid. Not so, however, if the ground be of a swampy or boggy nature, or if the soil be light, yet retentive of moisture, after the manner of a sponge; then drains should be laid deeper—4, 5, or even 6 ft., according to the nature of the case. On the top of the drain-pipes some rough rubble should be laid, if available: failing this, a thick sod of turf is a good alternative choice to lay over each joint; this turf will take years to thoroughly decay.

Ground-Work.—When the paths and drains have been arranged for, any necessary ground-work may be proceeded with, and alterations in ground-

level may be made to suit the circumstances of each respective case. Even in very limited gardens some attempt should generally be made to vary the ground by mounds and undulations. A level surface lacks variety and diversity of outline, as well as lessening the interest from the picturesque point of view in the surroundings. In altering the levels, the advice previously given to take due care of the surface-soil must be followed, and use only made of the sub-soil for other purposes. This kind of ground-work is best done in fine weather—at the least, it should not be proceeded with when the ground is excessively wet, except under stress of circumstances. A too rapid rise or fall should be avoided in the formation of mounds or banks of soil as much as possible; as any shrubs, &c., planted on it will, during dry weather, with scarce an exception, become too dry at the root. In some cases, perhaps, this advice cannot be followed out; then, however, it will be better to build up in a rustic manner with rock-work, or other material, and to fill in the interstices with suitable plants. This will form a barrier against the soil behind it, and permit it to be finished off in a manner suitable for the well-being of other plants.

Previous to any shrubs being planted, the soil intended for their reception should be dug over once or twice to get it into good working order. If the soil has not previously been removed, it will be better to dig it two spits deep, or, in garden phraseology, to trench it; if it be soil that has been removed to alter the levels, one spit deep will be sufficient, provided that, at the same time, in both instances the ground is well broken up. Soil in which shrubs have not previously been grown, will not want any manure for the first few years; and in all cases it is best to guard against a too luxuriant growth, especially at the outset. Some additions to the soil may be needed for American plants (so termed by the nursery trade), as rhododendrons and hardy azaleas, &c.; and peat-loving plants thrive best in a light soil of an open friable nature; peat and light loam suit them best. Before planting such, due provision should be made for their requirements.

Planting Shrubs.—In planting, due regard must be paid to the future growth and development of the trees and shrubs which have been chosen, more particularly the former, and those of larger growth among the latter. Those that are chosen as prominent objects should not be planted too closely together; but those that are intended to be of a permanent character should rather be interspersed with others which can eventually be dispensed with, kept in due bounds from time to time, and used as occasion may require to fill up any blank spaces

caused by imperfect growth, or sometimes by the death of a few plants. A judicious admixture should be made of evergreens and deciduous subjects, the former being made a prominent feature in the foreground. Trees and shrubs grown for the beauty of their flowers, or for their distinctive foliage, should be so arranged as not to clash with or mar each other's beauties. Different kinds of shrubs that flower at about the same time should not be congregated or grouped together in a garden of medium size, unless it be a group of rhododendrons, or a bed of roses. Herbaceous plants of robust and stately growth may be advantageously intermingled with the shrubs; but of this and other matters of detail we shall treat more fully in future articles.

Shrubs are frequently planted in a slovenly manner, as though nothing had to be done but to dig a hole, stick the plant in, and fill in the soil again. In each case, note should be taken of the size and quantity of the roots, and provision made by digging the hole which is intended for their reception sufficiently large to permit of the roots spreading themselves out in a proper manner all around. Previous to placing the plant in its future position, the soil should be carefully lightened up underneath it, and some finer soil should be spread over the surface; and after the tree or shrub has been placed in position, some more fine soil should be spread over the top of the roots, filling in with the ordinary soil nearly to the surface, and then treading it in gently yet firmly. Each shrub should be watered after it is planted, even if the roots are not dry, as it tends to settle the soil around them, thus inducing the young rootlets to lay hold of it more quickly. After the planting has been finished, advantage should be taken of a fine day, when the ground is in good working order, to go round each plant and tread the soil down more firmly to assist in retaining the plant in position; then lightly to fork up the ground between the shrubs, adding more soil around each, so that the intervening space is left level, and finished off in a workmanlike manner.

In the case of young trees and shrubs that are at all likely to take harm from strong winds, it will be far better to secure each one with a stake or stakes. One is sufficient for plants of moderate size, but three should be used for those of larger growth. In performing this operation care must be taken to avoid the possibility of any future injury to the stems through coming into contact with the stake, or the material used in tying. A piece of coarse canvas or a small band of hay would greatly assist in preventing injury from either cause: it should be bound round the stem previous to the operation of tying it to the stake. The best material for tying is tarred yarn, which is very durable, and would not

in many cases ever require to be renewed, as the probability would be that the plant would become well established before it became rotten. Care must be taken not to tie too tightly, which, if done, will necessarily injure the bark; and inspection should be made, as the growth of the tree or shrub progresses, to prevent harm being done through the swelling of the stem; where this is liable to occur, the tie should be renewed more loosely.

It is an excellent plan to affix a name to each specimen that is planted, unless it be one well known to every person who possesses the smallest knowledge of gardening. Labels of permanent character should be chosen in preference to wooden ones: samples of these can be seen at any nurseryman's or florist's who keeps a general stock of horticultural requisites. There are now two or three good kinds in the market, and it would be somewhat invidious to recommend one above the other.

No planting should be done during frosty weather; if frost intervenes whilst the work is in progress, the planting had better be postponed. If it happens that the plants are on hand at such times, their roots must be protected against injury. It is, of course, assumed that immediately they are received their roots are temporarily covered with soil to prevent their becoming too dry; if frost threatens, more soil should be added, and above that some light litter, to prevent the soil from being frozen. Some planters place litter round the plants after being planted; we do not advise this, as it causes the soil to be trodden upon more than is necessary. It is not, we think, commonly known that frost penetrates more deeply into hard ground than it does into that which has lately been moved; therefore, if this mulching is necessary it is the more needed in the case of established plants, with their roots nearer the surface; even then, however, we by no means recommend it.

Planting is best done during the autumn months, commencing, if possible, in August or September if the weather be favourable and the ground works well. Sometimes it may be needful to wait a little later, if the ground be too dry, consequent upon a severe drought, but it is far better to get this work completed in good time than to defer it until colder weather or heavy rains have set in. That it can be done thus early, and done well, we have proved from practical experience, and close observation extending over several seasons. When the growth of evergreens is completed, removal may be performed with safety. We have seen hollies moved in May, June, and July, even when growing, and with no bad result ensuing; but it is otherwise in most cases. The only precaution needed is to guard against injury to the roots either by exposure or from removal with too small a ball of soil. Of course, when removed at such seasons

of the year, more attention is needed in keeping them well supplied with water at the root, and at times over the foliage as well. The great object aimed at, and gained by early planting, is the opportunity thus afforded for the plants to become partially established before the winter comes to try their constitution. This is more particularly the case with regard to evergreens than deciduous plants: the roots of the former are, during the quieter season of the year, more active than those of the latter, by reason of the foliage to be sustained and kept in vigour. If planting is done during mid-winter, when the weather is most trying, more failures will occur among the evergreens than among the other plants.

In purchasing plants that have been previously removed from the spot where they were growing, it is necessary to exercise great caution to see that their roots have not become unduly dry, and thus injured by exposure. In any case where such purchases are made, the roots should be dipped into water, in order to assist in the restoration of their vital power. To assist in counteracting any possible injury, it is a good plan to partially prune the plants; this removal of growth will, to a considerable degree, ease the roots of the work they have to perform in sustaining the life and vitality of the plant. Nurserymen ensure the safer removal of many plants by growing and preparing them in pots of convenient size; this is an excellent plan, especially with plants of somewhat delicate constitution in their younger life. These, even if they cost a trifle more, will soon outstrip others that have not been so prepared, and speedily prove themselves to be the more profitable purchase of the two. Many of the best of our climbing plants are thus grown—plants which are always needed to establish themselves quickly, and to fill their allotted space. Ivies, among other well-known plants, are always more satisfactory if purchased in pots. Although they can be had more cheaply without this preparation, their appearance will not be in their favour for some time after planting, even if it ever becomes so. An ivy from a pot will, after planting, go as far as three or four on the other plan. Plants when grown thus for planting purposes are, when turned out of pots, frequently found to be a mass of roots, some of which should, where possible, be carefully disentangled before planting. If the ball of the plant be at all dry, it should, in all such cases, be dipped into a pail of water to thoroughly saturate it, care being afterwards taken to see that there is no recurrence of the same thing. To assist in preserving the plant, when planted, from becoming too dry, it is a good plan to insert it rather lower in the soil than usual, so that the latter can be slightly hollowed out to form a cavity, of which the plant is the centre. The soil

around plants from pots should be carefully and firmly pressed down with the hand. On this point, and the attention in regard to watering, will greatly depend the success of their future cultivation.

Training of Plants.—The training of climbing plants to the walls of the house, &c., is a matter demanding care and discretion, so as not to injure the brickwork or masonry. The use of nails and shreds is not advised, neither do we recommend studs with eyes; the best plan is to have galvanised iron-work, thrice painted green, and fixed in panels as the case requires. The diamond-shaped mesh is the best; it should be about the size of the old-fashioned window-panes used in lead casements, and can be fixed with less injury to the walls than the other systems, likewise easily removed at any time. In securing the climbers to the iron-work, tight ties should be avoided, as it is a great mistake to make them if permanent tying material be used, for the vitality of the shoot is thereby choked as growth progresses. Painting galvanised wire may seem to some a useless operation; far from it, however, for we have had to contend with injury to the shoots through their coming into contact with unpainted wire.

The Lawn.—After the arrangements of the ground for the shrubs, and their planting, have been finished, attention should be given to the formation of the lawn; due regard having, of course, been had during the progress of the former work for the proper disposition of the soil. It is not well either to lay turf, sow seeds, or finally prepare the ground for a lawn, until the planting has been finished, as the planting must, as a matter of course, necessitate a great deal of treading upon the surrounding ground. A reserve spot, too, will be necessary on which to keep the shrubs during the progress of planting, as well as to temporarily protect their roots from exposure to the air; and the space allotted for the lawn will admit of a portion of it being utilised for that purpose, prior to its final preparation for turf or seeds. Whilst the ground-work of laying out the pleasure-garden is in progress, note must be taken of the fact that it is not essential, nor expedient, to allow for such an amount in depth of good soil for that portion of ground which is to be laid out in grass to form the future lawn as is needed for the shrubs and flower-borders. If due regard is paid to this matter, a considerable quantity of good useful soil may be economised advantageously, and appropriated to the well-being of the trees and shrubs; yet this is a fact which, we think, is often lost sight of in the formation of gardens, being thought of little moment at the time. If a uniform depth of six inches of good soil, not rich, can be secured over

the whole surface of ground which is intended for the future lawn, that will be amply sufficient for all requirements, provided that the subsoil is moderately good; if resting on a chalk formation, and thus being more liable to injury from drought, a slight addition would be necessary.

As soon as a definite idea has been arrived at in connection with the arrangement of the ground for the lawn, thought must be taken as to its requirements in respect to drainage. In some cases it will not be necessary, whilst in others it will be of great service to provide for drains, for the reasons given in the preceding remarks on the planting of shrubs. During a great portion of the year the lawn is made use of for walking; its condition, therefore, should be such as to allow of this being done with comfort and pleasure, which is impossible if the ground is at all retentive of moisture. It is better, we think, to err on the side of allowing it to become too dry, than on the opposite one; not so, however, in relation to other parts of the garden, where the medium course should be taken. The advice already given in respect to the depth of drains may again be safely followed, providing for an outlet, or outlets, that will not incur any liability of being choked. It is as well to safeguard as much as possible by arranging for a main drain of larger proportions, into which the smaller drains may run. After the completion of the drainage, the soil should be prepared for the reception of the turf or grass seed. This preparation must be done carefully so as to prevent any future sinking of the ground, which would render the appearance of the lawn unsightly, as well as involving extra labour in setting things right again. Fine weather should be chosen for this work, when the surface soil can be trodden down firmly, and in an equal manner all over. It does not, however, follow that the ground should be *level*; far from it, a variation will be more pleasing to the eye and less devoid of formality. Hollows from which the water cannot readily escape should, however, be avoided with every care. A gentle rise towards the borders around the shrubs is an improvement; so also is it around any large flower-bed. All this work, as it progresses, can easily be finished off to suit the taste, particularly when the ground can be worked easily. A somewhat critical eye is needful to see that there are no indentations or rises to spoil the future effect; this can be discerned while the ground is being finally prepared in a careful manner, by raking it down to a fine surface.

If turf is chosen, as it will be necessary to do if *immediate* effect is the object aimed at, it should be taken from pasture-land, not too luxuriant, and from upland in preference to lowland districts. In the former case, the herbage composing the turf will

consist of finer-growing varieties of grass than in the latter, and will, therefore, be more adapted for a well-kept lawn—requiring less labour in mowing, and always looking better when mown.

Great care in the selection of turf is also requisite in other respects; daisies are frequently found in abundance. These, perhaps, are not so much objected to, and some we have known to have had a preference for them. But others do not like them; and dandelions are a constant source of annoyance if allowed to establish themselves, and should always be carefully guarded against at the outset. If they are troublesome, extreme measures should be resorted to. For this purpose we recommend oil of vitriol, to be used in the following manner:—Having obtained a small quantity (half a pint or a pint will suffice) in a glass or earthenware vessel, it should be poured out into a smaller receptacle for direct use as required, for which a wineglassful will be sufficient at a time; it should then be applied by means of a sharply pointed stick, which is all that is needed; this should be dipped into the liquid, and the heart of each plant pierced deeply with it. After a few days the plant will be found to be burned up, and invariably beyond recovery. In its application this strong poison should be used very carefully, and not a drop be allowed to waste itself on the grass, which it will inevitably kill wherever it comes into contact with it. Two or three applications during the season of growth will clear off these plants as they come on in successive stages.

A small-growing kind of plantain also causes much trouble, especially if allowed to increase; this can be got rid of in an effectual manner by hand-weeding during the summer-time, without the aid of the poison. Other weeds may occur, but those named are the worst, and if taken in time a great deal of future labour and trouble may be saved; it follows, therefore, that it is the best plan to avoid them as much as possible as soon as they make their first appearance. To do this more effectually, the turf should be seen before it is cut for removal.

Turf.—Preparation for removal is needed by rolling, cleansing, and mowing. The rolling will cause it to be cut in a more equal and even manner; the cleansing includes the removal of stones or other hard substances, and any weeds to be seen; and the mowing will greatly add to its future appearance when laid down. The turf to be removed should then be marked out, so as to get it cut in an equal and systematic manner. Each piece of turf should measure three feet in length by one foot in breadth, which is the recognised standard of measurement, and a lesser size should not be accepted. Experience in cutting the turf is a point to be observed in order

to get it of an equal thickness all over. Those who are unaccustomed to the work, and not adepts in the use of the turling-spade, frequently cut the turf either too thick or too thin. A uniform thickness of one inch and a half is enough for all requirements. If much thicker, the separate pieces of turf will break up, as well as be too heavy for removal; if much thinner, there is a risk of depriving the grass of too many of its roots, besides incurring the liability of injury through drought, if a period of any length intervenes before it becomes well established.

In laying the turf in its place, the use of the turf-beater is requisite, as the work progresses, so that any inequalities in the surface of the lawn may at once be remedied. When the pieces of turf are cut true to measure, the work of laying them down is greatly facilitated. After the work of laying out the turf is completed, the frequent use of a turf-beater, or a rather heavy garden-roller, will greatly improve the appearance of the lawn. After this has been done a few times, the edges may be cut with a sharp edging-knife, so as to obtain a clean smooth edge; in order to secure this being correct, a garden-line should be used. If the edge to be cut is straight, the use of a few sticks to secure the line in position will be necessary; this will prevent any deviation by slightly bearing against it with the knife. When curves have to be cut, more sticks will be required to get the line true; this requires to be done with care, so as to ensure a true sweep of the edge.

If the turf is laid during spring-time, attention must be given to seeing that it does not become too dry. This will readily be observed by the contraction of the turf, leaving spaces between the individual pieces; if this has gone on to any considerable extent, some finely sifted soil should be procured and worked in with a broom, and then watered well—with a rose, to distribute the water in an equal manner. The mowing for the first few times should be done with a scythe, applying the roller afterwards; but when the grass has become well established, the mowing-machine is far preferable, acting as its own roller as well. Afterwards no great difficulty should be experienced in keeping the lawn in good order. It is not well to mow it with a machine when very wet, so as to cause it to have a smeary appearance when finished. During a dry summer season, renewed attention will be required to keep it fresh and growing. At no time should the grass be allowed to get long, or the machine will not perform its work well.

Lawns from Seed.—When immediate effect is not so much the object, and there is therefore more time to spare, the better plan will be to sow lawn-grass seeds in preference to laying turf. By sowing

the future lawn the ultimate result will be more satisfactory, especially when a good selection of lawn-grass seeds has been obtained from a respectable seed-house. We had thought of giving a list of the best kinds, but it might in some cases be misleading, and it will be always better to consult the seedsman, describing to him the nature of the soil, whether poor or the reverse, and if inclined to be wet or dry. In either case the selection can be varied to suit different requirements by experienced seedsmen. In this manner the choice of kinds is limited to those most suitable, and the future appearance of the lawn will be far superior to that of one laid down in turf. Previous to sowing the grass seed, the ground will need more careful preparation than is the case in turf-laying. It must be worked down to a fine even surface by the judicious use of the rake in fine weather; at the same time it must be quite firm, so as not to yield to the foot on pressure. On this, when brought to a good condition, the seed should be sown, but not during windy weather, the object being to get the seed equally distributed over the surface. Around the outskirts of the lawn this must be done carefully, to prevent its extending beyond the limits. When the seed has been sown, some finely sifted soil should be scattered over the surface and then finely raked over. After this has been completed, a medium-sized roller should be passed over the whole surface, in order to press it down smoothly and firmly. For this purpose a roller of the improved pattern, with *rounded* edges, is far the best, as it will not leave marks behind its work, as is the case with one having a sharp edge. When this is completed no more attention will be necessary beyond keeping watch against any disturbance of the surface by birds, which will sometimes be attracted to the spot by the fine soil, and will be drawn also by the seeds. They should be scared away before they have done much injury, and watch should be kept against future depredations. This attention will not be needed for many days, for if the germinating power of the grass is good it will soon be beyond their liking. As the young plants gain strength, and during fine weather, the roller should be passed over the surface occasionally, having previously swept off any litter that may have accumulated; this will effect the disposal of any worm-casts, and will keep the surface in good condition. Mowing should only occasionally be attempted during the first season, and then a scythe should be used in decided preference to a mowing-machine, which instrument will cut off the grass too close to its roots, whereas with a scythe this can easily be avoided. In this manner the grass will gain strength and become well established, more particularly so if not allowed to be trodden upon to any

extent beyond what is absolutely necessary, as this will cause injury. During the second season of growth the mowing-machine may be used in fine weather; but when rain is prevalent, the scythe will still be preferable, until a thoroughly strong plant has been obtained. Afterwards the mowing-machine may be relied upon to do the greater part of the work. It must, however, be used with caution around the shrubs and specimen trees, so as not to cause any disfigurement to them. When the grass is wet, a broom should be passed over it before being mown.

Lawn-Tennis Grounds.—To ensure these being satisfactory in all respects, a careful preparation is needed over and above that given to a lawn alone. The object is to secure the ground being in a fit state to play upon even during variable weather, for which a firm surface is essentially requisite; yet it must be so done as to admit of the water passing off freely. This can be performed by excavating the allotted space of ground to a depth of about one foot; then, if the spot is in any way disposed to be retentive of moisture below that level, drains should be laid from six inches to one foot lower, according to the nature of the case, taking the precaution to allow a fall sufficient for the water to pass off freely. Some rough material, as clinkers or broken pieces of brick, should be laid over the tops of the pipes, and over the entire surface of the intended ground, to a depth of at least four inches; on this should be spread, if obtainable, another two inches ofinders. When this is completed, some stout pegs should be procured for driving into the ground at frequent intervals; then, with the aid of a spirit-level, these pegs should be made to indicate the correct final level of the ground, and thus act as a guide in again filling in the soil previously excavated. Whilst this is being done, no effort should be spared in working the soil down firmly, in order to prevent any unseemly depressions occurring afterwards. This being done, the turf may be laid, if it can be obtained of good quality; otherwise the better plan will be to sow grass seeds, and wait patiently for the results, which course will in due time prove the more satisfactory of the two. The advice previously given respecting the after-treatment must be followed, but with more frequent *rolling*, to preserve a smooth even surface. A lawn-tennis ground always needs more applications of the roller than are accorded to the other parts of the lawn; and attention in this respect will go far towards preventing injury if the lawn is played upon frequently. It will also need mowing somewhat oftener, if the grass is found to grow fast, as it will do in moist weather. If this is done, heavy dews and slight showers will not be such deterrents to the

pursuit of the game in comfort. If the size of the ground will permit of slightly shifting the net occasionally, this should by all means be done, as it will materially preserve the lawn.

Rockery for Ferns and other Plants.—

When this work is well performed in the first instance, it will constitute one of the most attractive features in the garden. It has also the distinct advantage of being adapted to gardens of limited extent. The error frequently made in the formation of rockwork is in not providing for sufficient depth of soil wherein the plants may take root and thrive. It is a mistake to think that the rockwork itself, with the addition of a little soil, can supply the needs of the plants. Brick burrs, from the brickfields, are useful in the formation of rockwork when stone cannot be obtained, but should never be used when the latter article is procurable. Those are by far the most fortunate who have stone at their command; the formation of the rockwork then becomes a pleasure, and more particularly so when the plants are found to thrive well afterwards. When the spot for the future rockwork has been chosen, it will be necessary to provide against any accumulation of water. This can be easily done by the use of a few drain-pipes, on which some rough material should be laid. As the rockwork is, of course, above the usual ground-level, these drains only need to be laid on the ground, or just inserted in it.

If ferns are to be provided for, some peat or boggy soil will be a great assistance, with the addition of good fibrous loam. The rougher portions of the peat should be used next the drainage; then the process of working in the rockwork (or burrs, as the case may be) can be advanced, having previously planned out the exact size and shape of the ground to be occupied. This is necessary in the first instance as the work, to be done well, needs to be commenced at the bottom or outside. In building up rockwork, all appearance of formality should be studiously avoided; and in but few instances will it be required to call in the aid of either mortar or cement (mortar is preferable) to attain the desired ends. Before commencing to build up the rockwork, a good quantity of soil should be at hand, and prepared in readiness for use. Some coarse pieces of peat and loam will be of considerable service; these, with broken bricks (the latter used so as to be hidden), will help to keep the material in position, and prevent the soil on the upper parts from washing down to the lower. The soil, if for ferns, should consist of at least one-third of peat or rotten-leaf soil, and good loam, not too close in texture; some sand, too, would be a useful addition. The peat can be dispensed with in the case of strong-growing flowering plants, and

need not be specially provided for by any other addition. Generally speaking, what is termed a light soil is the best to use for plants on rockwork, and that used for ferns will be found to suit most other plants so grown. As the outer margin of rockwork is completed, some more soil will need to be added, so as to raise that next to be placed into position somewhat higher—of course, however, varied in height, and in size of pieces chosen, so as to avoid formality.

It is not advisable to arrange rockwork in too upright a manner if there is room at disposal to have it otherwise. By the free use of soil, which is essential to the plants themselves, it does not require any great amount of solid material to produce a good effect; every piece should show *on the surface*, and to the best advantage. After all the stone has been used, the planting may be forthwith commenced by adding a little more soil, rather better in quality if possible—beginning at the higher points, choosing the plants that grow most strongly for the places where they will show to the best advantage, and gradually working down till the base is reached. If the rockwork has to be done with brick burrs, the more rugged portion of each should be brought to the front, and any pieces of formal shape be kept in the background. Should a wall form the back of the rockwork it may be advantageously covered, either with some of the forms of small-leaved ivies, or with the evergreen small-leaved Virginian creeper.

Any narrow piece of ground which it is not considered advisable to lay in turf or devote to any other purpose, can be used with much advantage for stonecrops (sedums and sempervivums), which do not require so much soil; neither should it be too rich, or their peculiar colours will not be developed in the best possible manner. A sunny spot will suit them well, and also some of the smaller Alpine plants.

In these remarks on the formation of rockwork we have omitted thus far to say anything in favour of the use of roots, old stumps of trees, or other rustic growths. These can be used, and advantageously, but should not be relied upon to maintain anything else in position. It is better to add such things at the time of planting, but not too freely, unless the growth of ivies and other creeping plants is to be encouraged at intervals; then they will serve to excellent purpose, and materially assist in the effect. Rustic arches and bowers can be arranged in association with rockwork, but require more room to be seen to advantage than can at all times be spared; when these are provided, the clematis and climbing roses will display themselves thereon in the best possible manner.

CHRISTMAS DECORATION.

THE custom of decorating hearth and home for the great Christmas festival, the "King's Birthday," is doubtless the survival of one that dates back to the earliest ages, and underwent revival from the date of the Christian era. In past times more of it was done in the house than in the church, especially in farms and country houses; but now things seem to have turned round, and the church is extensively decorated, while a little greenery and a few holly-berries often suffice at home. The pictures that adorn the Christmas numbers of illustrated papers have often been carefully studied from records and legends of the past, and it must be confessed that the roomy old house of former days gave far more scope for Christmas decoration than does the modern villa. A very interesting account of old Christmas decorations, customs, and sports, is to be found in Washington Irving's "Bracebridge Hall," and a still more minute one in Mr. Charles Reade's "Put Yourself in His Place."

All preparations, either in church or house, must of course be made, and all litter cleared up, on Christmas Eve, according to the old usage which dictates that when

"The hall was dressed with holly-green,
Forth to the woods did merry men go
To gather in the mistletoe."

To most of us now, however, mistletoe comes through the medium of the local greengrocer, who receives it from the Gloucester and Herefordshire orchards, or imported from those of Normandy, where it grows in profusion.

Evergreens.—First and foremost among the evergreens that may be called "sacred" to Christmas is the holly, with its dark, shiny, prickly leaves, and in some years its wealth of scarlet berries. One wonders, year after year, where all the holly comes from; and, in truth, gardeners who understand its market value, generally delay the pruning back of the shrubs in their masters' gardens and shrubberies till Christmas is pretty well in view. In the extensive woods of mid-Kent vast quantities of holly are grown, and there are always plenty of spoliators to dodge the gamekeepers and cut down large quantities for the London market. In the New Forest, again, the holly attains almost the dimensions of a forest tree; but though now and then a raid is made, the rangers have hitherto managed to keep depredations within bounds. The holly in suburban gardens, where it flourishes, generally pays its tithe; and quantities of it come up to the metropolis from the Midland Counties, where it is cut in woods, forests, and hedgerows.

Box is another favourite evergreen; it is not only a native plant, plentiful in the woods and hedges of some counties, but is so compact and glossy that decorators who study effect rely much on it for filling up spaces.

Bay is chiefly plentiful throughout the Southern Counties, where the aromatic shrub grows quickly and almost becomes timber. Cuttings of it do not reach the market very often.

Laurel looks well at first, but soon dries up and decays. Portugal laurel keeps good and fresh much longer, and, the leaves being dark and glossy, with reddish stems, it is valuable as an accessory.

Ivy, especially when in berry, and scarcely less so, in a mild season, when full of bunches of buds, is lovely for wreaths, fills in well where other evergreens without it would look scrappy, and is invaluable for its decorative qualities; but ivy, where there is much heat and gas, and it is kept up long, smells very unpleasantly, and should never find a place in sitting-rooms, nor indeed in churches, unless they are very lofty.

Spruce and other firs are useful to mix with evergreens, but it is a downright sin to cut rhododendrons with the flower-buds of the distant spring on them, or laurustinus with its ruddy bunches of buds, which wither and die directly. Ilex, or the evergreen oak, which grows plentifully in the Southern Counties, is delightful stuff for wreath-making when mixed with other things, though it looks rather dead alone. Arbutus, whether in bloom or with the ripe strawberry-like berries (which are poisonous), is pretty if not required to be kept up long; and cuttings of yew, with or without berries, are very useful. Every remnant of yew, however, should be carefully burnt; for if thrown out anywhere where cows, horses, donkeys, or mules can pick it up, it is most poisonous, and they eat it greedily.

Wreaths.—Many people imagine that the construction of a wreath implies merely the tying together of bunches of green stuff; but this is a great mistake, for every wreath must have a foundation, unless it is to exasperate the putter-up by dropping to pieces in his grasp. The foundation that causes a wreath to hang most gracefully, and be most pliable, is a prosaic bit of rope. When possible, and where the decorations are on an extensive scale, this rope should be got from the maker's unsized—that is to say, unstiffened. If the exact length of wreath can be determined beforehand, and there are definite supports or nails to hang it on, a loop can be arranged at either end by doubling the rope over and binding it down with twine before putting on

the evergreens. Twine is really better than anything else for tying on the evergreens. Like the rope, it should be unsized, and purchased in hanks, which can be cut, like skeins of thread, in lengths of about a yard and a half.

Some people prefer fine wire to twine for fastening on, because it can be clipped in without a knot; but it is more wearing and pricking to the fingers, and the wreaths are a trifle, but only a trifle, less pliable. Narrow wreaths for following the outlines of a piece of furniture are, however, best made on and with wire, as it is desirable to keep them exactly in place, and prevent any tendency to "give" or droop in the middle.

The great thing to secure in a wreath that has to

—must not have a flat side, but be bushy all round; and the best way of making such a wreath is to hook one end on to something from which it will hang, and put comparatively small bunches of greenery all round, allowing four or five bunches—one back, another front, and one at either side. The four sides of a round cord or rope sound imaginary, but the practical worker will find out what they mean in a few moments. An important point to remember is that all *festooned* wreaths must be narrowed off towards the ends, as in the classic example given in Fig. 1. This alone can give lightness and elegance.

A great point to be kept in view when decorating is, that no fresh nails should be driven unless in



Fig. 1.—SCULPTURED FESTOON FROM POMPEII.

go against a flat surface is that the under side shall be flat, and the evergreens all on the upper side of the wreath. The maker should always wear old kid or housemaid's gloves; and the way to get a nice "fat" prim wreath of holly or mixed evergreens is to put the bunches on in triplets—one on the left, one in the centre, and one on the right side, securing each with a separate turn of the twine. If the preparations are on an extensive scale, every wreath-maker should be attended by a "feeder," whose business it is to lay the little bunches ready to hand, and mix them judiciously, unless they are to be all of one kind, such as laurel or holly wreaths. Every wreath prepared for a definite place, unless provided with loops, should have at least a quarter of a yard of uncovered rope at either end, to admit of being tied round a pillar or to a hold-fast. If twine is used for tying on the evergreens, the helper or "feeder" should always be ready with a fresh length when needed, and knot it securely to the end of the last piece while the wreath-maker holds it tight.

Wreaths for central positions—say, for making festoons across a hall, or from the centre of a ceiling

the very last resort, and then only after permission. Make as much use as possible of all existing nails and holdfasts, but drive no fresh ones. If it seems very desirable indeed, summon the master of the house, or someone in authority, before doing it, for there are ways *and* ways of doing everything in this world; and sometimes inspection by an experienced person will reveal a rafter or beam into which a nail may safely be knocked without doing any harm or being very visible, whereas the same nail driven into plaster might make a large and unsightly hole, and not hold firmly after all. In the decoration of churches this is quite as important a consideration as it is in a house.

Ribbons and Borders.—Wreaths use an immense mass of material, and it is generally advisable to employ ribbon or bordering, which can be made *ad libitum* in long lengths beforehand, and used at discretion. The foundation may be either strips of cartridge paper or cheap calico, from one to two inches wide. For many years a village, that in these days of steam is reached in about half an hour from London, boasted only its one ancient

"extinguisher" parish church, with two aisles separated by a row of Saxon arches. The beadle, sexton, and parish clerk, though a typical Englishman, had a German name, and a gift for decoration that had probably descended to him from



Fig. 2.—LAUREL AND BERRY RIBBON.

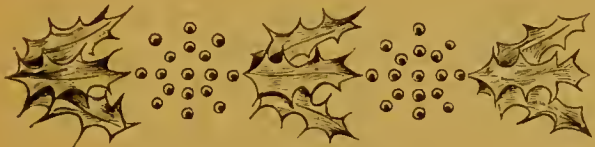


Fig. 3.—HOLLY RIBBON.

some remote ancestry. No one but himself ever touched the church at Christmastide; but he prepared for it many weeks beforehand, and became so locally famous that he was much employed by the neighbouring gentry to decorate their houses. Round each pillar in the church he placed three bands made of single laurel-leaves or triplets of holly-leaves, divided by berries (scarlet or yellow) arranged in figures of stars, circles, or different kinds of crosses. Above these were small close wreaths, of which he was wont to say that there were not two alike in the church; but then that church was small. Figs. 2 and 3 show this kind of ribbon or border, everything being secured by needle and thread on a broad tape or binding. This style carried out in a smallish room was very pretty, and did not take a great deal of green-stuff.

Fig. 4 shows another method of making bordering



Fig. 4.—HOLLY BORDER.

out of holly-leaves and berries sewn on, and which looks very pretty as a bordering round a motto or text. Many decorators depend largely on what they call ivy-ribbon, made by stitching ivy-leaves on a foundation two inches wide, so that none of the foundation can be seen. Such ivy-ribbon looks very effective in conjunction with broad scarlet tape, or strips of scarlet calico, and we have seen a whole wall covered with lozenges of ivy-ribbon interlaced with lozenges of the scarlet, and with a large paper flower at every intersection of the lines. We have seen few prettier effects than this.

Mottoes.—If it is desirable to put up some seasonable sentiment, this is best done in holly or box if

time permits; and such letters stand out well on a background of red cloth or flannel. The letters must first of all be marked out, and the holly snipped ready into small pieces, that can be sewn on with a needle and thread. This is very pretty for the home; but if a large hall or ball-room has to be decorated, it is much easier and more effective to cut the letters out in white wadding, and gum them on to the cloth. The best quality should be used, or it will not be snow-white; and the way to do it is to lay the wadding with the woolly side downward on a board, mark the letters on the "skin" side, and cut them out with a very sharp knife. They will want a little trimming up with the scissors, but not much. Large gilt, red, and blue paper letters, cut out and pasted on white grounds, or *vice versa*, are very useful in many places; and sometimes the letters may be bought ready cut out. Texts of large size for decoration of churches, schoolrooms, &c., are to be had at very reasonable prices from the National Society for Promoting the Education of the Poor, at Broad Sanctuary, Westminster, and also at some shops in Paternoster Row. Wadding and paper both cut into capital figures of stars, anchors, crowns, &c.; and the former are sometimes sprinkled with powdered glass or frosting powder, but this is not very desirable. The star is a very favourite design in Christmas decoration, in remembrance of the Epiphany,

"When with gladness men of old
Did the guiding star behold."

Laths.—There are some situations, such as arches, which it may be desirable to fill in with greenery. The way to do this is to have laths cut the exact length of each section of the arch; cover one side of each with evergreens, very evenly and not too thickly, fastening the bunches with wire; and then a carpenter can easily "spring" them into the arches. This is a thing that an amateur carpenter can often manage, and it is very satisfactory; but it does require some skill to do it properly. Short lengths of lath can often be covered and put together to form a framework; and if the ends are carefully cut, they will stand in some positions; or an invisible length of wire, attaching the framework to some other object or a distant nail, will suffice to keep it in place. In this manner architraves of greenery may be placed over doors, and look very handsome; and a house when nicely decorated for Christmas always looks doubly furnished.

Hoops and Triangles.—Where an absolute hoop or circle of evergreens is wanted for a decorative purpose, the very best thing to make it on is a child's wooden hoop of not too robust dimensions. These are very effective in some situations. A very good

general rule to go by is to make things large and bushy that are high up and at some considerable distance from the eye, and to reserve the finer work for lower positions, where they are on a level with the heads of ordinary mortals.

Two or three interlaced triangles are nice ornaments where there is any considerable amount of blank space; but if not clearly defined, they lose their effect, and are mere incongruous jumbles. They should always be made on thin rods of wood, or stout wire about as thick as skewers, firmly secured at the corners, and each should be covered separately and put together afterwards.

Berries.—There are years when holly-berries are scarce, and at all times people who have to buy their green-stuff find that the berried holly is far more expensive than that which is without. The moral of this is to use the berried pieces judiciously, and where they will do themselves justice and make a show. The red berries are considered the typical cheery things for Christmas; but in gardens and shrubberies there is also yellow-berried holly, which makes a pretty change. And if berries are few and far between, the best possible use of variegated-holly should be made, so as to get as much variety as possible. Often, however, it is necessary to have recourse to artificial berries, which can be bought by the gross or spray from artificial flower-makers, or "all-sorts" shops, where they sell art pots and pans, and Pampas grass, and such things. Each berry, when single, is mounted on a short length of green-covered wire, by which it can easily be twisted into place. But if expense is an object, there is a way of making very effective berries at home. This is by taking brown or grey peas, parboiling them so that they are soft enough to put a needle or a wire through, and then colouring them red. The best way is to dissolve some red sealing-wax in methylated spirit in a saucer or soup-plate, or any shallow vessel, and, putting the peas in, turn them over from time to time so that they may get equally coated all the way round. Of course the red thus obtained is a little vivid for holly-berries, but at a short distance the imitation is very good, and not very likely to be discovered by those who are not in the secret. Another way is to use coralline beads; and they also do very well at a distance, and save a great deal of mess and trouble, besides coming in again for a similar object another year.

Pictures.—There are many ways of treating pictures. One is bunching up the evergreens between

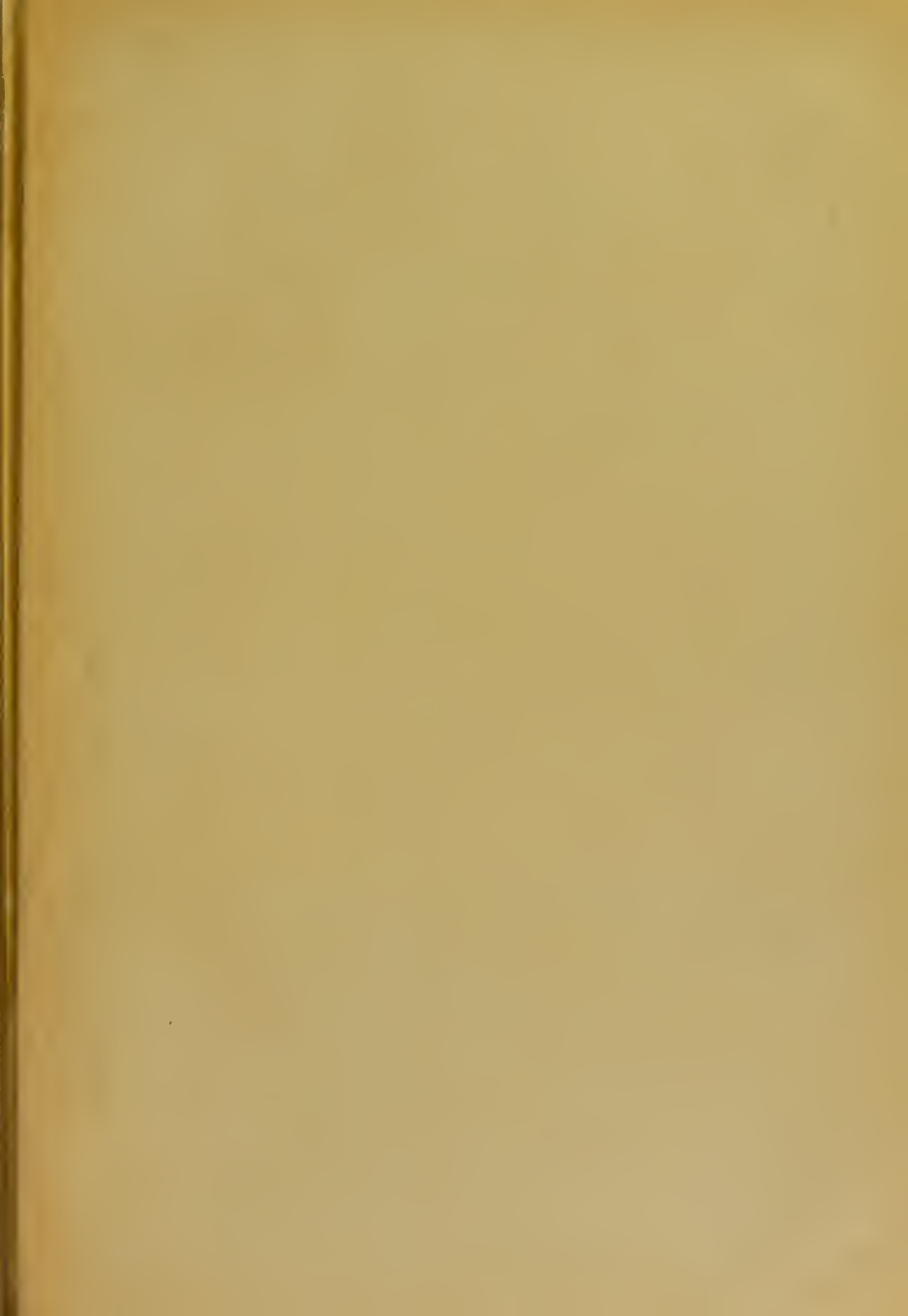
them and the wall, a process that is disastrous to the wall unless the evergreens are clean, and in towns they are often very dirty. It is frequently possible to carry a narrow wreath up the picture-cords and make an extra bunch over the nail. Or extra and separate frames of wood covered with evergreens can be suspended over the frames proper. In fact, a new mode of decorating the old familiar things will suggest itself to almost everyone when the materials are collected, and they are ready to go to work.

Gaseliers, &c.—Chandeliers and their equivalents for burning gas may be very prettily decorated with finely made wreaths of holly, alternate ones made of variegated and the dark green being used; but in the case of gaseliers with weights that pull up and down, care must be taken not to interfere with the power of moving, as well as not to put the wreaths where they will catch fire. Chandeliers proper look well with a pretty wreath round each candle-socket, and this is also a seasonable finish to any candlestick. The gas-lantern or other hanging lamp in the hall needs to be well hung with bushy greenery; and in some large families where plenty of rollicking fun goes on, this is often the chosen place for a bush of mistletoe; but quiet prudent folks generally suspend the latter safely over the middle of a table or other large piece of furniture, so that no one by accident or design may be able to get exactly underneath.

Candlemas Day.—The time-honoured epoch for taking down Christmas decorations from church and house is Candlemas Day, February 2nd. Terribly withered they are by that time. Candlemas in old times represented the end of the Christmas holidays, which, when "fine old leisure" reigned, were far longer than they are now. Every particle ought to be removed long before for cleanliness' sake, and not, as old Herriek puts it, because—

"For look, how many leaves there be,
So many goblins you shall see."

But when decorations were kept up till Candlemas in those merry old times, there was no gas, nor was the atmosphere of houses heated as it is now; there were too many chimneys and fireplaces for that. It is found desirable now, in many houses, to remove them after Twelfth Day, January 6th (the Epiphany or *Jour des Rois*); and by that time they are quite dusty and dirty enough, and everybody (except the children) is tired of holiday-making, and ready to return to the sober business of life.



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